

# Enhance Energy Inc., Wolf Carbon Solutions Inc., and North West Redwater Partnership

KNOWLEDGE SHARING REPORT

DIVISION A:  
SUMMARY REPORT  
Calendar Year 2022

Submitted on:  
March 31, 2023



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## Disclaimer

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## Project Definition

In order to ensure consistency across platforms, operational information contained in this report uses the Project definition as outlined in the "Enhance Energy CO<sub>2</sub>-EOR Project at Clive Field, Project ID: 8613-7752" as reported in the Alberta Emission Offset Registry ('the Registry') at [AEOR Listing Detail \(csaregistries.ca\)](https://www.csaregistries.ca). CO<sub>2</sub> injected numbers in this report differ from the Registry reports. The EOR protocol requires a 0.5% holdback be subtracted from injected volumes to allow for "unintentional reversals" and Enhance has applied this discount in documents filed with the Registry. Injected volumes in this report do not include the holdback. Associated injection amounts, energy use and emissions data are based on third-party verified Offset Project Reports filed with the Registry.

Remaining collective funding (RCF), as defined in the CCS FUNDING AGREEMENT – THE ALBERTA CARBON TRUNK LINE PROJECT made the 30th day of September 2010, defines net tonnes of CO<sub>2</sub> sequestered in a year as the mass of CO<sub>2</sub> injected in the year less any CO<sub>2</sub> that escapes or is extracted from the subsurface. It does not include a holdback or offsets from energy or other inputs used by the Project. These amounts are not reported in this document.

Certification



**enhance**  
ENERGY

**CERTIFICATION ON BEHALF OF ENHANCE ENERGY INC.**

CERTIFIED on behalf of Enhance Energy Inc. named in the "CCS Funding Agreement – The Alberta Carbon Trunk Line Project", to be true, accurate and complete, to the best of my knowledge, based on reasonable inquiry and due diligence, as of the date of this certification.

The Certification applies to the information supplied by Enhance Energy Inc. only and does not imply certification of information supplied by other Recipients.

Per:

Blair Eddy, P.Eng  
President & COO

Date:


March 31/23



**CERTIFICATION ON BEHALF OF NORTH WEST REDWATER PARTNERSHIP**

CERTIFIED on behalf of the North West Redwater Partnership named in the “CSS Funding Agreement – The Alberta Carbon Trunk Line Project,” to be true, accurate and complete, to the best of my knowledge, based on reasonable inquiry and due diligence, as of the date of this certification.

The Certification applies to the information supplied by the North West Redwater Partnership only and does not imply certification of information supplied by other Recipients.

Per:   
Peter Duda (Mar 28, 2023 07:43 MDT)

Date: March 23, 2023

Peter Duda  
General Manager - NWRP



**CERTIFICATION ON BEHALF OF WOLF CARBON SOLUTIONS INC.**

CERTIFIED on behalf of Wolf Carbon Solutions Inc. named in the "CCS Funding Agreement – The Alberta Carbon Trunk Line Project" to be true, accurate and complete, to the best of my knowledge, based on reasonable inquiry and due diligence, as of the date of this certification.

The Certification applies to the information supplied by Wolf Carbon Solutions Inc. only and does not imply certification of information supplied by other Recipients.

Per:  \_\_\_\_\_

Jeff Pearson, P. Eng.

President

**Date: March 31, 2023**



## Part A – Executive Summary

Enhance Energy Inc. (“Enhance”), North West Redwater Partnership (“NWR”) and Wolf Carbon Solutions Inc. (“WCS”) have constructed and are operating a fully integrated Carbon Capture and Storage (“CCS”) project, the Alberta Carbon Trunk Line (“ACTL”), incorporating:

- Carbon dioxide (“CO<sub>2</sub>”) capture from the existing Nutrien Redwater fertilizer plant;
- CO<sub>2</sub> capture from the NWR Sturgeon Refinery using gasification and Rectisol® synthesis gas purification and conditioning technology.
- A 240 km CO<sub>2</sub> transportation trunk line; and
- Storage, including Enhanced Oil Recovery (“EOR”).

The ACTL project provides critical CO<sub>2</sub> gathering and distribution infrastructure to enable the cost-effective management of CO<sub>2</sub> emissions. The project also represents an opportunity to showcase how the Province’s vast bitumen resources can provide competitive and environmentally sustainable energy amid tightening environmental standards.

The Project applies for and registers CO<sub>2</sub> credits under the Alberta TIER system. Three Offset Project Reports (OPRs) have been prepared for 2022; December 1, 2021-February 28, 2022, March 1-May 31, 2022, and June 1-December 31, 2022. Offset credits for the three reporting periods have been registered. Enhance has used the baseline and project conditions and boundaries as defined in the Offset Project Plan and OPRs to prepare information contained in this Knowledge Sharing Report. Details of the Offset Project Plan and Offset Project Reports can be found at: [https://alberta.csaregistries.ca/GHGR\\_Listing/AEOR\\_ListingDetail.aspx?ProjectId=157](https://alberta.csaregistries.ca/GHGR_Listing/AEOR_ListingDetail.aspx?ProjectId=157).

This Summary Report highlights the information contained in the attached Division B Detailed Report. The status and progress of each component (see Figure 1 below) will be summarized, as well as the relevant financial information.

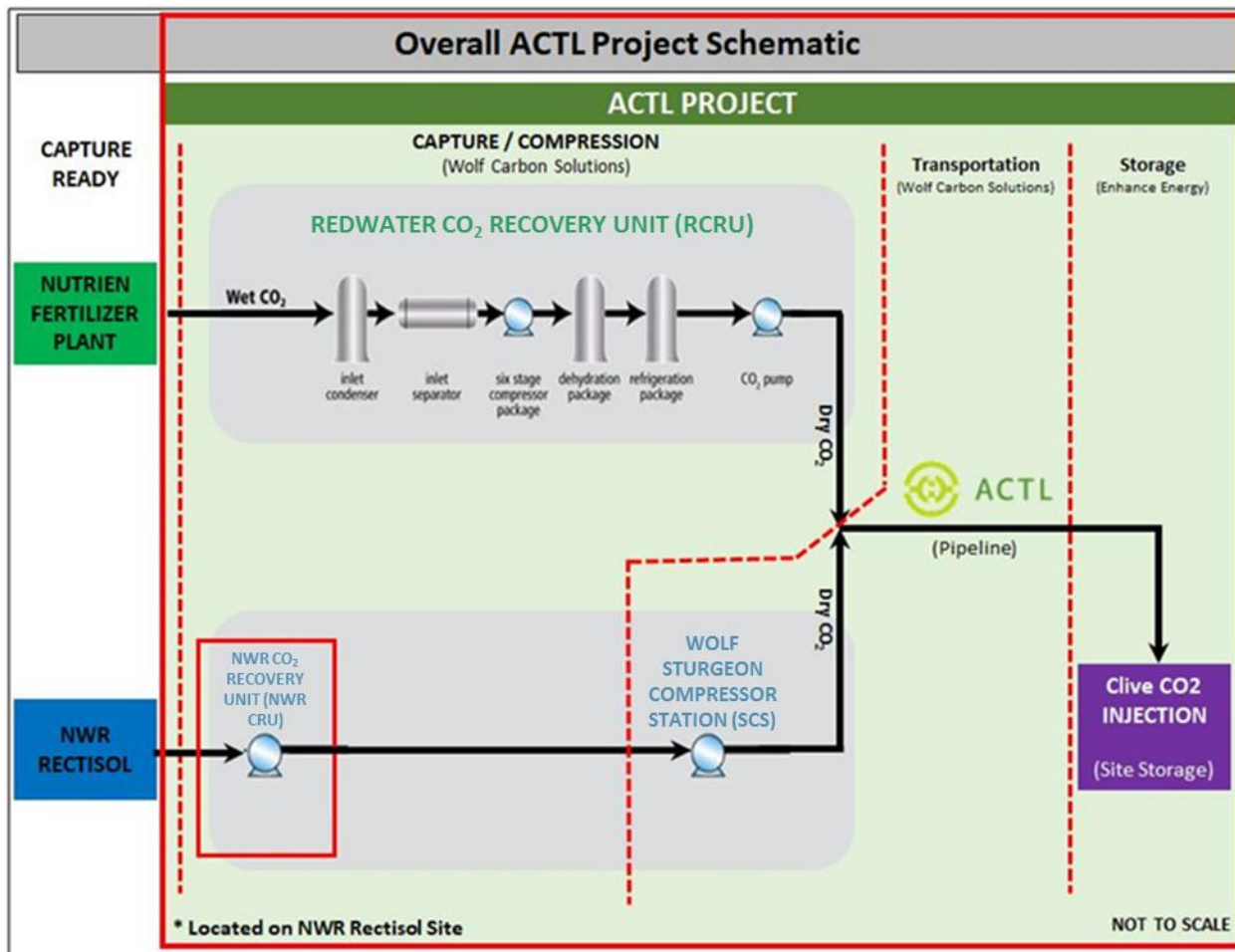


Figure 1 - Overall ACTL Project Schematic

2022 marked the second full year of commercial operations for the project. As of year-end, cumulative CO<sub>2</sub> injection reached 3.2 million tonnes.

Key Activities Achieved During The 2022 Year Include:

CO<sub>2</sub> Delivery:

- WCS commenced delivery of CO<sub>2</sub> to Clive on February 26, 2020, via the ACTL pipeline. Although volume fluctuated due to planned and unplanned downtime at NWR and Nutrien, CO<sub>2</sub> deliveries continued uninterrupted in 2022.

WCS Redwater CO<sub>2</sub> Recovery Unit (RCRU):

The RCRU continued operation in 2022. Deliveries were interrupted for the first 56 days of the year and for 19 days at the end of December due to outages at Nutrien. Nutrien also completed a 20-day planned turnaround in October, WCS performed preventative maintenance during this time.

NWR Rectisol® Unit:

- The Rectisol Unit operated very reliably in 2022 and captured >99 % of the CO<sub>2</sub> produced by the Gasifier unit. Production and operation of the Rectisol were consistent with the unit design.
- The NWR refinery executed a major planned maintenance turnaround in 2022. The scope was refinery wide, and the duration was 66 days in length.

- Subsequent to the turnaround, the gasifier unit experienced an unplanned outage caused by cracking in a vessel in the shift reactor section. The repairs took 32 days during which time no CO<sub>2</sub> was sent to ACTL.
- Aside from these major maintenance items, the carbon capture outages were reduced to 10 days or 96% availability with several outages caused by pump fouling issues.
- In particular, the meantime between failure of the gasifier burners greatly improved beyond the design target of 2000 hours and gasifier reactor availability was not the cause of any outages.
- Overall, 0.896 Million T of CO<sub>2</sub> was captured and delivered into the ACTL (2455 T/day average).

NWR CO<sub>2</sub> Recovery Unit (NWR CRU) and WCS Sturgeon Compressor Station (SCS):

- Deliveries at NWR CRU and SCS were interrupted for 98 days beginning in August due to a 66-day planned turnaround and an additional 32 days of unplanned downtime at NWR.

Clive CO<sub>2</sub>-EOR and Storage:

- Enhance drilled and completed one new horizontal injection well bringing the total number of active injection wells to nine.
- Certain components of the measurement, monitoring and verification (MMV) work at the Clive were paused or deferred in 2020 to minimize having consultants travel to the area as a precautionary response to COVID-19. The full program was re-instated in 2021 and 2022 and expanded to collect baseline data for future CO<sub>2</sub>-EOR and storage development. A full description of 2022 activities and interpretation of monitoring results can be found in the Detailed Knowledge Sharing Report. Geosphere, hydrosphere, and biosphere monitoring programs verify containment within the Leduc formation.

## Part B – Project Status Overview and Commentary

### NWR

In 2022, NWR continued to improve the operation of the Gasifier Unit including the Syngas separation and CO<sub>2</sub> purification in the Rectisol section.

NWR executed its first site wide major maintenance turnaround between August 12 and October 15 for inspection, equipment repairs and catalyst changeouts.

On October 23, the gasifier unit developed a leak in a vessel in the shift reaction section of the unit and was taken down for repairs. These repairs took 32 days to complete and restart the unit and the unit ran smoothly afterwards. The leak was determined to be caused by stress corrosion cracking on a surge vessel in the shift reactor section. The immediate remedy taken was to retire the affected vessel and to replace it with a similar vessel while operating the unit in a modified manner. An extensive engineering review of metallurgy in the shift reactor section of the unit was undertaken and other piping changes will be made at the time of the next scheduled maintenance turnaround.

### WCS

In 2022, WCS continued to focus on consistent and stable operations and safety while minimizing downtime through several scheduled turnaround activities. Maintenance activities were performed in parallel with planned outages at both NWR and Nutrien, including a successful inline inspection of the 24" pipeline.

Deliveries through WCS facilities continued throughout 2022 except as noted in the Executive Summary.

### Enhance Energy Inc.

In 2022 Enhance expanded the CO<sub>2</sub> EOR & Storage scheme area. Focus was on continuing and optimizing CO<sub>2</sub> injection to the project and drilling and completing one new horizontal injection well to begin injection into the expanded scheme area. Additional baseline areas were added for the Measurement, Monitoring & Verification ("MMV") in preparation for future expansion.

Figure 2 provides an overview of the active CO<sub>2</sub>-EOR and storage area. The AER Approval area is outlined in blue with the future expansion area shown in red. Existing injectors are shown in purple with a down arrow at the toe. Producers are shown as green. The new injector is highlighted with a yellow oval. Drilling and completion records and logs for the new injector have been filed with the AER.

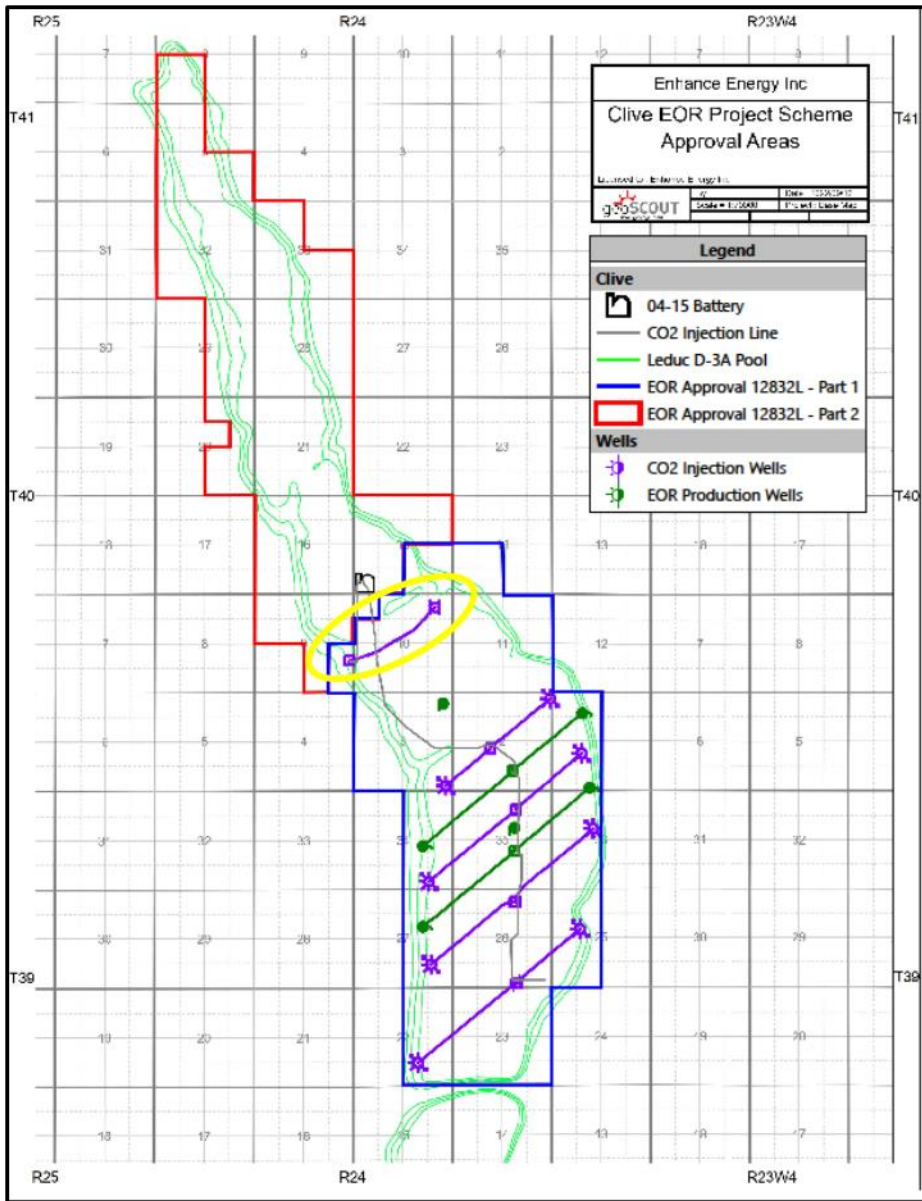


Figure 2 Clive CO2 EOR and Storage Project 2022

The ACTL project employs technologies that are commercially mature. The primary innovation of the project is its scope and integration of various existing technologies to demonstrate an economic carbon solution for Alberta.

## Section 1: Facility Design

Details of facility design can be found in the 2020 summary knowledge sharing report. A brief description of major components is provided here to provide context for the reader.

The ACTL Project consists of the following major components:

1. The Redwater CO<sub>2</sub> Recovery Unit (RCRU) located adjacent to the Nutrien Redwater Fertilizer that captures a wet CO<sub>2</sub> stream from Nutrien, dehydrates it, and compresses it to ACTL pipeline pressure.
2. The Rectisol Unit at the NWR Sturgeon Refinery that separates dry CO<sub>2</sub> from refinery process gas allowing it to be fed into:
3. The NWR CO<sub>2</sub> Recovery Unit (NWR CRU), located within the refinery complex, that compresses CO<sub>2</sub> from the Rectisol Unit to an intermediate pressure allowing it to be pipelined to:
4. The Sturgeon Compressor Station (SCS) that takes the CO<sub>2</sub> from the NWR CRU and compresses it to ACTL pipeline pressure.
5. The ACTL that transports the CO<sub>2</sub> from tie-in points of the RCRU and SCS to:
6. The Clive CO<sub>2</sub> EOR and Storage Project.

Components 1 through 4 are located in Alberta's Industrial Heartland, approximately 45 km north-east of Edmonton (Figure 3). The ACTL runs approximately 240 km south to the Clive CO<sub>2</sub> EOR and Storage Project, located about 35 km north-east of Red Deer (Figure 4). There the CO<sub>2</sub> is injected to enhance oil recovery from a mature oil field and safely stored roughly 1900 m below ground.

The Project uses proven, commercially available technology.

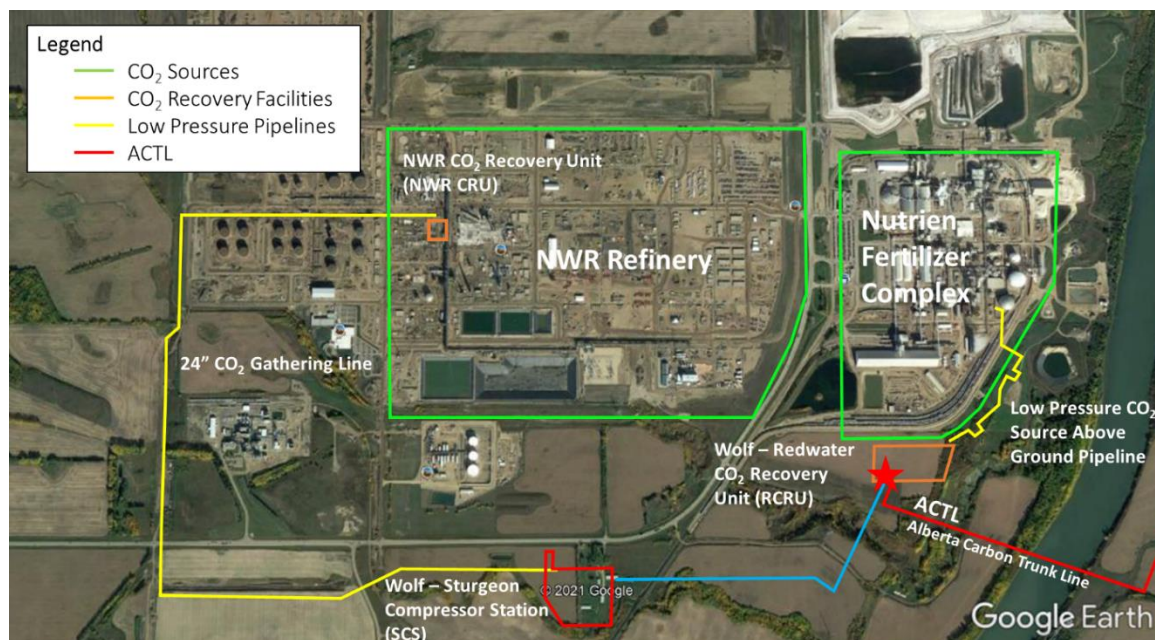


Figure 3 - Map of ACTL Project Heartland Area Infrastructure

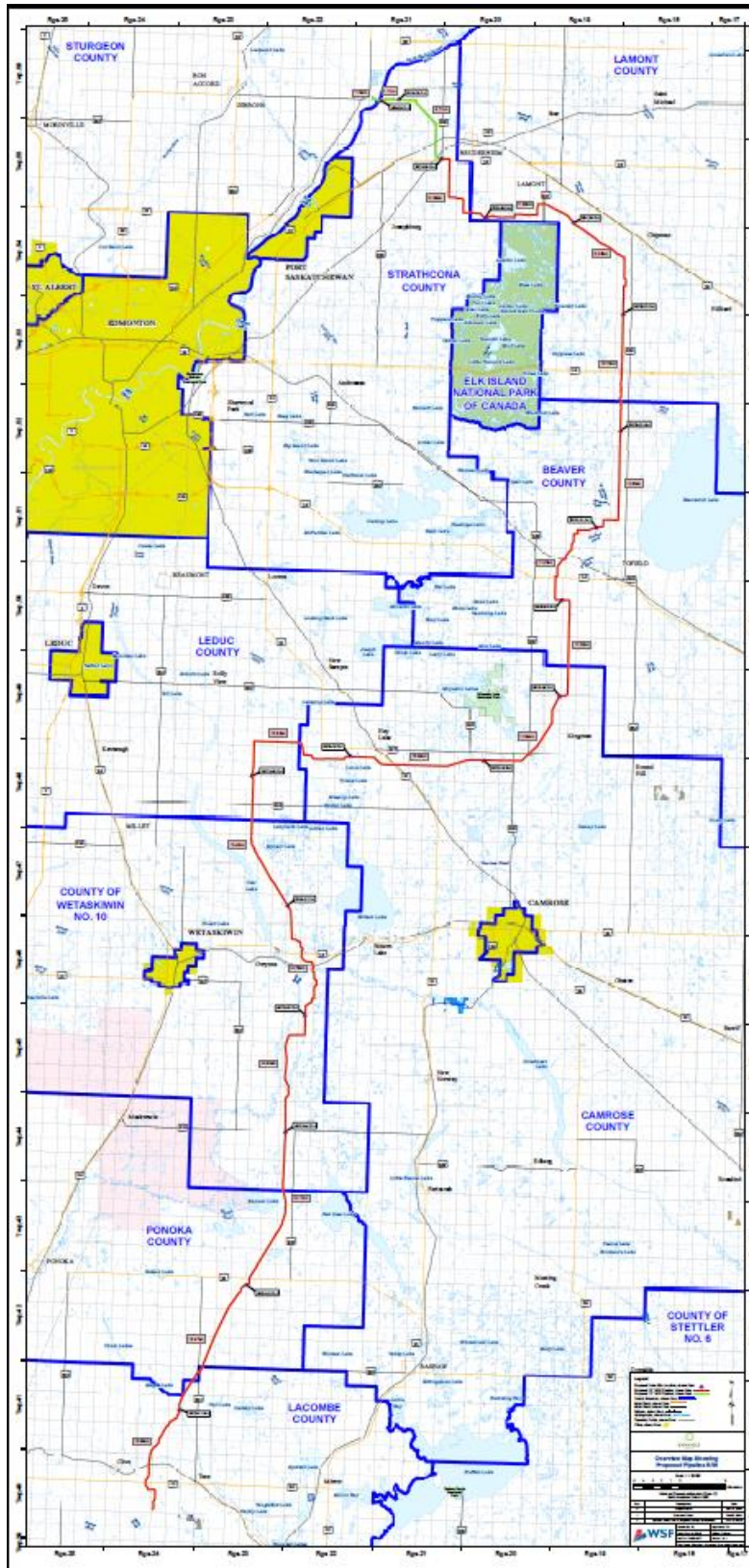


Figure 4 - ACTL Route Map

## Section 2: Facility Construction

### A) RCRU

Details of construction and commissioning of the RCRU are included in Section 2 of the 2020 and previous summary knowledge sharing reports.

### B) NWR Rectisol®

Details of construction and commissioning of the Rectisol unit are included in Section 2 of the 2020 and previous summary knowledge sharing reports.

### C) NWR CO<sub>2</sub> Recovery Unit (“NWR CRU”) and Wolf Sturgeon Compressor Station (“SCS”)

Details of construction and commissioning of the NWR CRU and SCS are included in Section 2 of the 2020 and previous summary knowledge sharing reports.

### D) Pipeline Facility

There were no changes to results of commissioning as reported in previous knowledge sharing documents. Please refer to Section 2 of the 2020 summary report.

### E) Injection Facility

Start-up of the CO<sub>2</sub> EOR and storage project is described in Section 2 of the 2020 summary report.

## Section 3: Geological Formation Selection

Storage for Enhance’s ACTL project is occurring at the depleted hydrocarbon reservoir at Clive.

### **Summary of Reasons for Selecting the Final Site**

#### *Practical suitability*

There are many practical reasons which make Clive a suitable storage site for CO<sub>2</sub>. The Clive reservoirs are mature waterflooded oil reservoirs. In this context, they provide:

- Containment for CO<sub>2</sub> since they have contained hydrocarbons for millions of years.
- Capacity for CO<sub>2</sub> storage due to significant production of oil and gas providing voidage.
- Injectivity for CO<sub>2</sub> demonstrated by substantial water injection and oil production operations for five decades; and
- Residual oil production to provide for economic support of large-scale CO<sub>2</sub> sequestration.

The Clive reservoirs are also unitized, enabling common ownership and royalty interests across the reservoirs. This provides the opportunity to take advantage of the unique geology, with minimal complications due to competitive ownership interests, in order to maximize storage of CO<sub>2</sub> and oil recovery.

#### *Geographical Suitability*

The storage site was also attractive due to its geographic location. Development in Clive enabled re-use of existing infrastructure, including roads, lease sites and pipeline right of ways minimizing surface disturbance and disruption to residents in the area. Year-round access and proximity to oil and gas services supports consistent and reliable operations, as required for a storage operation.



Details of the geological setting and suitability of Clive for CO<sub>2</sub> storage are provided in the 2020 Knowledge Sharing Summary and Detailed reports. There is also extensive discussion of the geological setting in the MMV plan filed in conjunction with the 2019 reports. See: [Alberta Carbon Trunk Line project : knowledge sharing report, 2019 - Open Government](#).

*Risks of storage into the geological formations and the measures implemented to manage and reduce such risks:* Initial storage for the ACTL project is occurring at Enhance’s depleted hydrocarbon reservoir at Clive. As depleted hydrocarbon reservoirs have securely contained fluids for millions of years, these reservoirs are very well suited for containment and safe storage of injected CO<sub>2</sub> and pose very minimal risk of leakage. Depleted hydrocarbon reservoirs in Alberta have typically undergone waterflood operations whereby water has been used to replace produced hydrocarbons. The injectivity of CO<sub>2</sub> is typically estimated to be three times the injectivity of water at reservoir conditions. Such waterfloods have been conducted at Clive, again minimizing any risk of storage in this field.

Enhance has conducted comprehensive geological and geomechanical studies on the rock (from the bottom of the well to the well head), formal storage and wellbore risk analyses, and monitoring tool selection. The outcome of this technical work was used to determine monitoring, measurement, and verification (MMV) requirements and methods noted above. Details of the geomechanical work are provided in the 2020 detailed report at: [Alberta Carbon Trunk Line project : knowledge sharing report, 2020 - Open Government](#).

## Section 4: Facility Operations – Capture and Compression

As of year-end 2022, all capture and compression facilities were operating. Energy use at the capture facilities for 2022 is summarized in the following tables:

REDWATER CRU			NWR CRU		
POWER	NATURAL GAS	TOTAL	POWER	NATURAL GAS	TOTAL
MW-hrs	GJ		MW-hrs	GJ	
25,835	4061		60,834	92	
GJ	GJ	GJ	GJ	GJ	GJ
93,007	4061	97,067	219,003	92	219,095
<b>Tonnes throughput</b>		<b>158,624</b>	<b>Tonnes throughput</b>		<b>886,290</b>
<b>MJ/kg</b>		<b>0.61</b>	<b>MJ/kg</b>		<b>0.25</b>

Table 1 - CRU Throughput and Energy Requirements

Note: throughput shown here and for the RCRU and NWR CRU (to SCS) is not identical to ACTL throughput. The first two are delivery into the ACTL and the latter is delivery at Clive. This is due to the large volume and high compressibility of CO<sub>2</sub> in the ACTL which results in variable storage amounts in the pipeline.

Air emissions upstream of the ACTL are associated with potential off-spec CO<sub>2</sub> and emissions from the RCRU Low Temperature Separator (LTS). Venting infrastructure is utilized primarily during operating maintenance activities and during start-up. Such vents are located prior to the pipeline tie-in and at various valve stations along the pipeline. There have been no specification deviation events that have resulted in product venting.

RCRU availability was slightly below expected availability of 98% during 2022. Actual availability was 95.3% excluding the scheduled turnaround that lasted 19.4 days. WCS completed the turnaround at RCRU in conjunction with a 20-day planned turnaround at the Nutrien facility. Unplanned downtime was attributable to operational issues during an extended period of extreme cold weather. There were no other significant issues or non-routine

repairs or modifications leading to or as a result of maintenance. Nutrien CO2 delivery online time was 80.3%, as operations resumed in the first quarter following an outage in 2021.

Product compositional analysis is not administered at RCRU prior to the sampling system located at the pipeline tie-in, and therefore actual non-condensable vapor composition results off the LTS are not available. The Nutrien CRF Vent stream off Low Temperature Separator table in the 2019 ACTL Knowledge Sharing report is considered to accurately represent the actual vapor stream off the LTS at RCRU.

Produced water associated with dehydration at the RCRU is disposed in as deep disposal well; see Section 1.8.1.3 of the Detailed Report. CO<sub>2</sub> produced at the NWR CRU is dry and does not require dehydration. There are no water emissions to the environment.

The daily and monthly CO<sub>2</sub> metered volumes for the SCS for 2022 are shown in Figure 5.

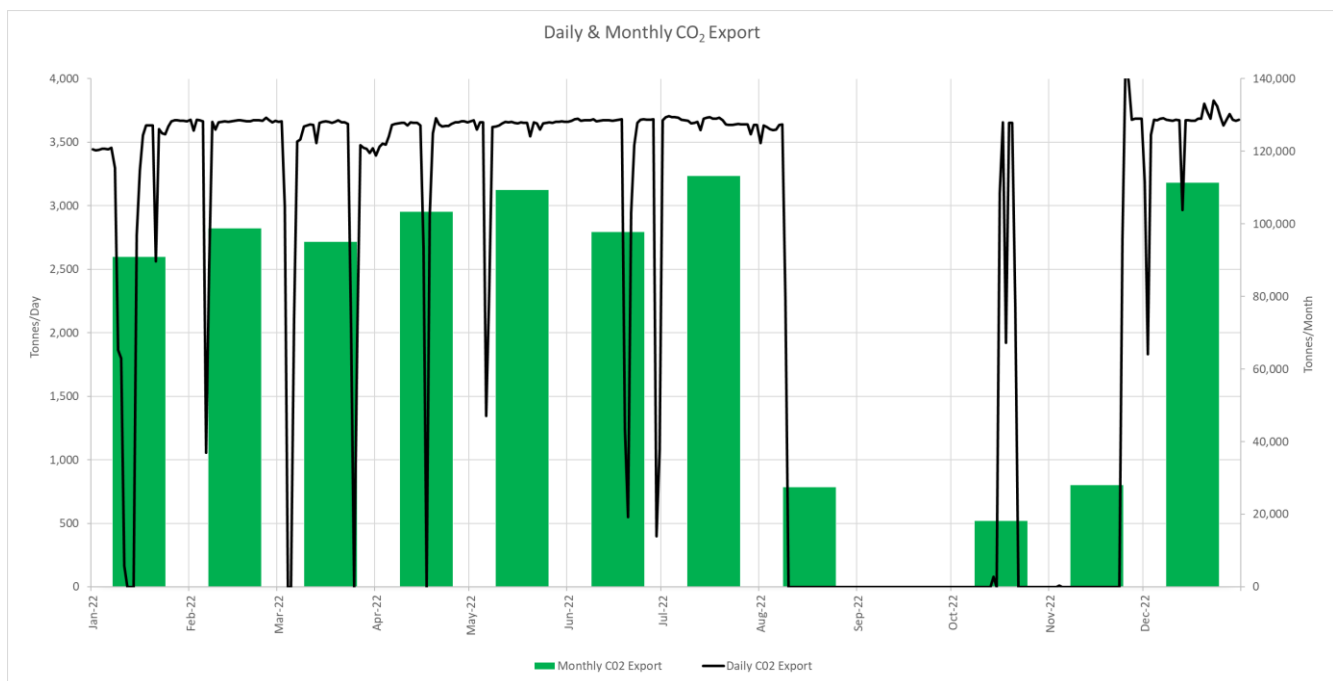


Figure 5 2022 SCS CO<sub>2</sub> Exports

There were no soil emissions during the reporting period.

## Section 5: Facility Operations – Transportation

Energy use for transport in 2022 is summarized in the following tables:

STURGEON COMP STN			ACTL MISC				
POWER	NATURAL GAS	TOTAL	POWER	NATURAL GAS	GASOLINE	DIESEL	TOTAL
MW-hrs	GJ		MW-hrs	GJ	litres	litres	
50,581	21.6		38.1	0.0	24,357	0.0	
GJ	GJ	GJ	GJ	GJ	GJ	GJ	GJ
182,090	21.6	182,112	137.3	0.0	833	0.0	970
<b>Tonnes throughput</b>		<b>886,290</b>	<b>Tonnes throughput</b>				<b>1,034,722</b>
<b>MJ/kg</b>		<b>0.21</b>	<b>MJ/kg</b>				<b>0.00</b>

Table 2 - ACTL Throughput and Energy Requirements

Wolf operators have conducted periodic routine inspections on the pipeline, and Wolf has engaged a third-party contractor to conduct aerial surveillance. Inspection results up to this point have been satisfactory.

SCS online time, which is the product of availability due to internal factors, was 98.9% for 2022. Downtime is attributed to pressure safety valve repair and in-line inspections performed over the 24" inlet pipe.

There were no accidental events or damage to the pipeline system in 2022.

## Section 6: Facility Operations – Storage and Monitoring

The main recycle compressor and DEXPRO™ dehydration unit continued to operate allowing production to continue. One new horizontal injection well was drilled and began CO<sub>2</sub> injection in 2022.

Landowner acceptance and approvals of pipeline, lease and facility dispositions has proceeded without issues, supported by Enhance's consultation and communication efforts and in compliance with regulation.

As of year-end 2022, over 3,200,000 tonnes of CO<sub>2</sub> has been injected and stored at Clive at an average rate just under 3100 tonnes per day. Injection has proceeded without incident and no trigger events (that would suggest CO<sub>2</sub> leakage) have been confirmed by the MMV program. As more CO<sub>2</sub> volumes become available via the ACTL, Enhance will apply to the AER to expand the project area and additional injection and production wells will be drilled.

The calendar day average rate of fresh CO<sub>2</sub> injection in 2022 was 2835 tonnes/day at an average concentration of 99.14%. The recycle compressor and DEXPRO™ unit (a proprietary dehydration technology) at Clive continued to operate in 2022. Recycle averaged 2300 tonnes/day at 87.97% CO<sub>2</sub>. Variations of CO<sub>2</sub> concentration were minor and within expected and acceptable limits. See Figures 7-9 that show fresh CO<sub>2</sub> injection rate and concentration, recycle CO<sub>2</sub> injection rate and concentration and total injection rate, respectively.

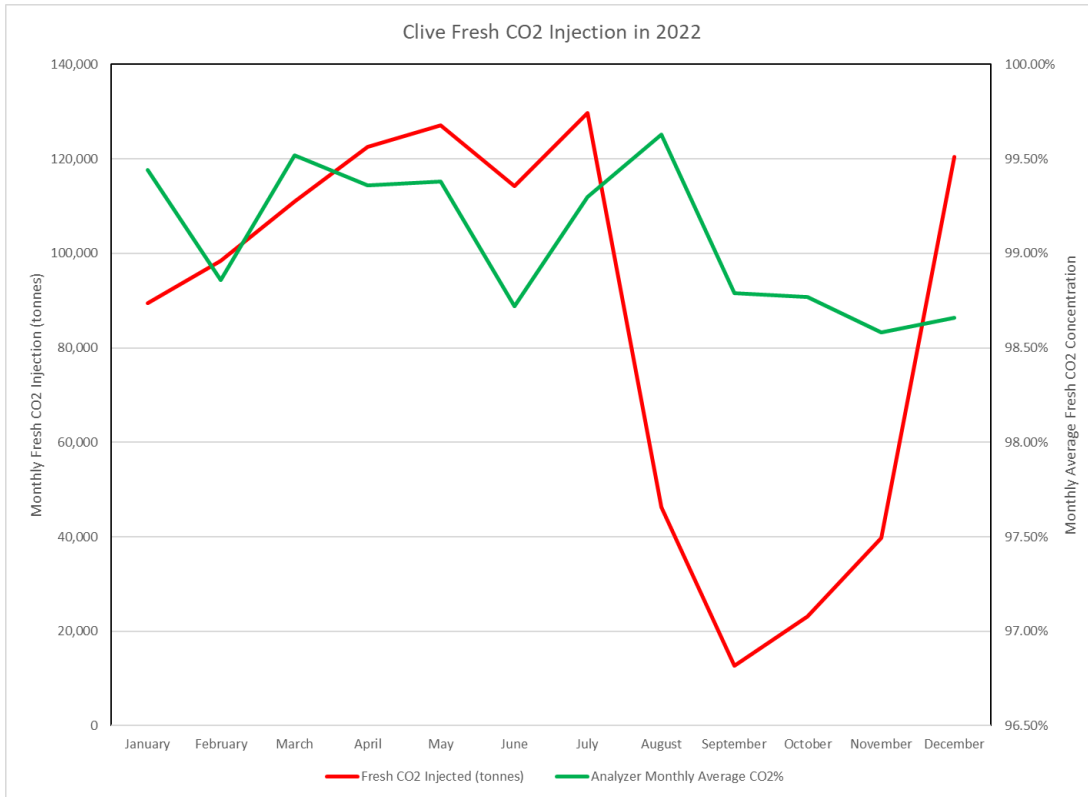


Figure 6 Fresh CO2 Rate and Concentration

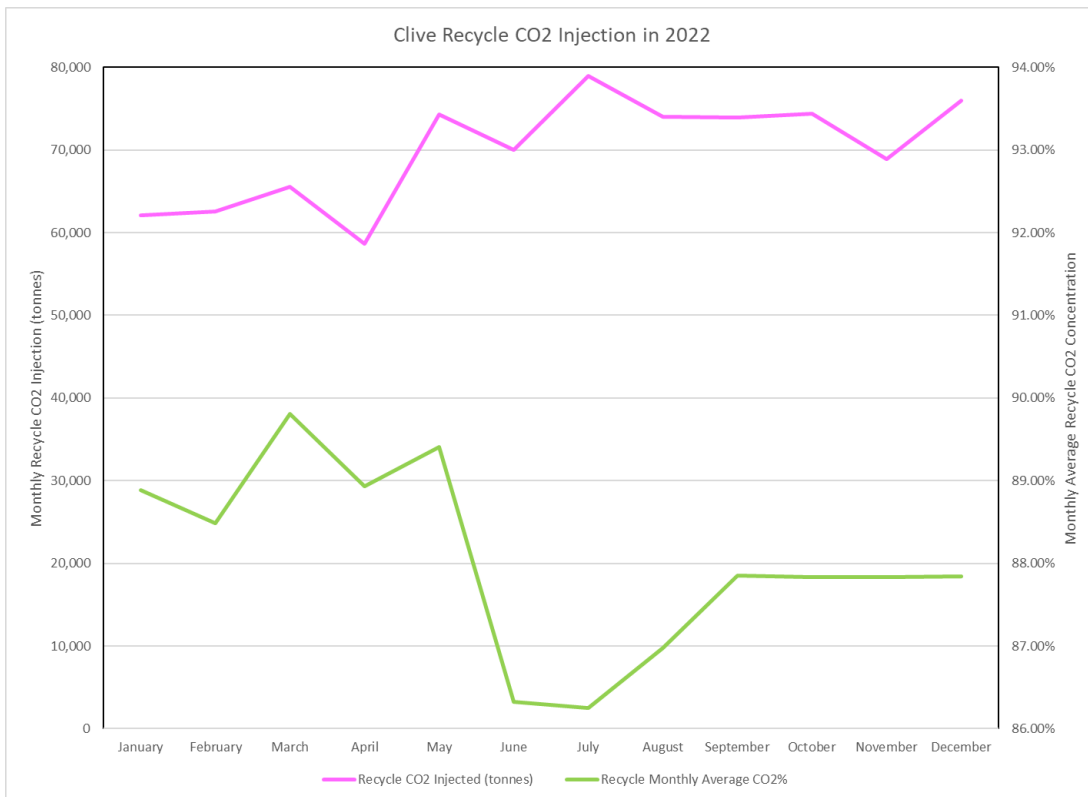


Figure 7 Clive Recycle CO2 Rate and Concentration

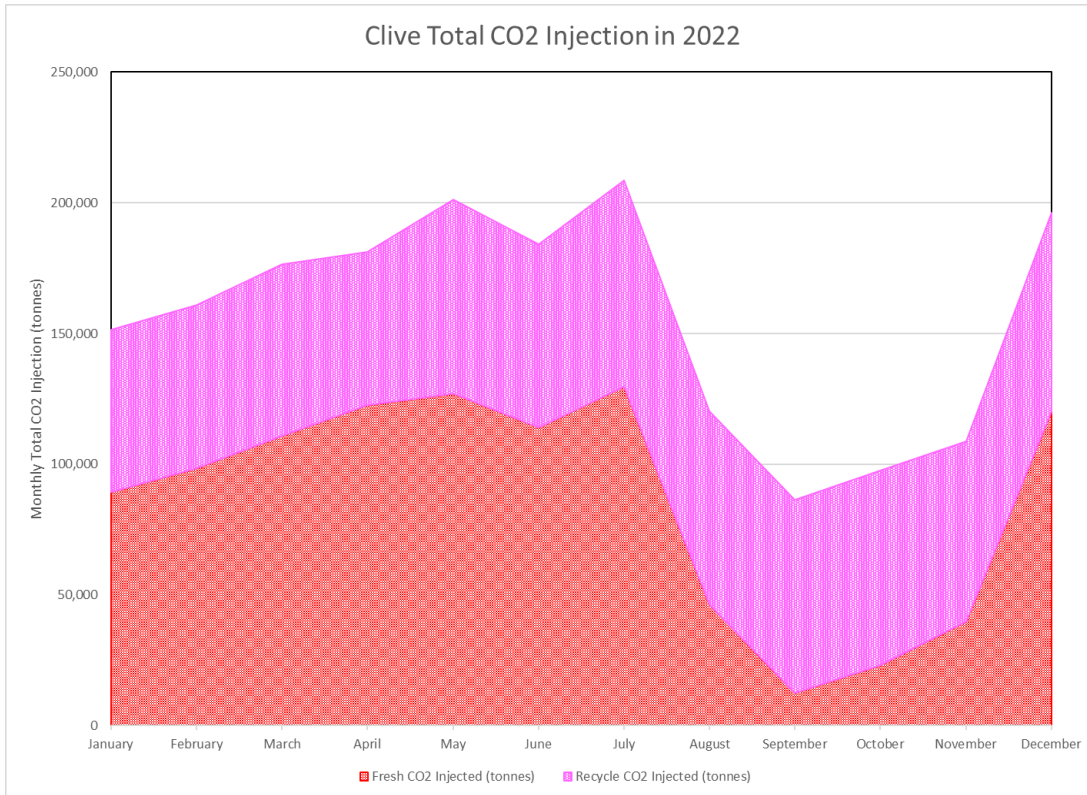


Figure 8 Total CO2 Rate

Monitoring techniques that are employed at the injection site are detailed in the updated MMV plan which was approved by Alberta Energy (AE) in November 2019 and available at [Alberta Carbon Trunk Line project : knowledge sharing report, 2019 - Open Government](#). Specifics of the 2022 MMV program are included in the Detailed Knowledge Sharing Report. The main activities undertaken in 2022 include:

- Additional surface casing vent flow monitoring of wells in the CO<sub>2</sub>-EOR area that confirmed containment.
- Soil gas, groundwater, CBM, Nisku and Leduc sampling were completed.
- Continued sampling and analysis of source and injected CO<sub>2</sub>.

The MMV program uses established techniques to provide redundant but complementary early detection of CO<sub>2</sub> containment issues. Over 2000 sample points have been collected to date from the geosphere, hydrosphere, and biosphere monitoring programs that verify CO<sub>2</sub> remains contained within the Leduc formation.

Enhance employs an extensive leak checking program during commissioning of surface facilities to verify the integrity of the system. All valves and fittings are checked for leaks and tightened and re-checked if necessary (see Section 6 of the 2020 summary and Section 4.5 of the detailed knowledge sharing reports for details). Operations personnel also perform routine visual and audible checks of the system during operation and have not recorded any leaks to date. Now that recycle gas is being blended into the injection stream the presence of H<sub>2</sub>S, which has a strong odour, will complement monitoring. The Clive battery is a sour facility and has H<sub>2</sub>S detectors located throughout. Operations personnel are trained in all procedures required to operate a sour facility.

The Project applies for and registers CO<sub>2</sub> credits under the Alberta TIER system. Three Offset Project Reports (OPRs) have been prepared for 2022; December 1, 2021-February 28, 2022, March 1-May 31, 2022, and June 1-December 31, 2022. Offset credits for the three reporting periods have been registered at approximately 937,000 tonnes. Enhance has used the baseline and project conditions and boundaries as defined in the Offset Project

Plan and OPRs to prepare this information. In order to register the credits, Enhance is required to calculate baseline emissions (which would be CO<sub>2</sub> emitted to the atmosphere if the Project was not operating) and Project emissions by gas type resulting from processes required to capture, transport and inject the CO<sub>2</sub> at Clive. The following tables represent the totals of these quantities for capture, transport and EOR-storage as reported in the OPRs. Note:

- The CO<sub>2</sub> injected amounts do not include a 0.5% discount as required by the CO<sub>2</sub> EOR protocol and as registered. The discount is excluded to provide actual stored amount in the table.
- Emissions include those from both levied and non-levied sources in total. These are reported separately in the OPRs.

<b>Total for 2022- Levied + Non-Levied</b>				
<b>Vintage Year 2022</b>	<b>Gas Type</b>	<b>Baseline Emissions (tCO<sub>2</sub>e)</b>	<b>Project Emissions (tCO<sub>2</sub>e)</b>	<b>Total Reduction, Sequestration or Capture (tCO<sub>2</sub>e)</b>
January 1 to December 31, 2022	CO <sub>2</sub>	1,034,722	1,858	1,032,864
	CH <sub>4</sub>	n/a*	199	-199
	N <sub>2</sub> O	n/a*	12	-12
	Other (CO <sub>2</sub> e)	n/a*	92,241	-92,241
Total for Reporting Period		1,034,722	94,310	940,412

Table 3 - Project Emissions and Storage

Details of the Offset Project Plan and Offset Project Reports can be found at: [https://alberta.csaregistries.ca/GHGR\\_Listing/AEOR\\_ListingDetail.aspx?ProjectId=157](https://alberta.csaregistries.ca/GHGR_Listing/AEOR_ListingDetail.aspx?ProjectId=157)

CO<sub>2</sub> delivery and injection records for Clive are included in Appendix A. The Alberta Energy Regulator (AER) and good reservoir management practice require that injected CO<sub>2</sub> must be allocated to the individual injection wells, of which there were six in the initial phase of the project with two more added in 2021 and one new well in 2022.

Details of the delivery metering system can be found in Section 3.8 of the 2020 detailed knowledge sharing report.

Appendix B contains analyses of monthly samples of CO<sub>2</sub> delivered by the RCRU and the NWR CRU-SCS as well as from injected fresh and recycle streams taken at Clive. Recycle samples are labelled as “DEXPRO DRY OUTLET GAS” or “DEXPRO WET INLET GAS” on the downstream and upstream sides of the dehydration unit respectively.

## Section 7: Facility Operations – Maintenance and Repairs

RCRU performance was slightly below expectations in 2022; availability was 95.3% excluding the scheduled turnaround that lasted 19.4 days. WCS completed the turnaround at RCRU in conjunction with a 20-day planned

turnaround at the Nutrien facility. Unplanned downtime was attributable to operational issues during extended period of minus 40-degree weather. There was no other significant issues or non-routine repairs or modifications leading to or as a result of maintenance. Nutrien CO2 delivery online time was 80.3%, as operations resumed in the first quarter following an outage in 2021.

The Rectisol Unit at NWR required no material repairs in 2022. A general plant maintenance turnaround was executed in 2022 with a duration of 66 days. Following the restart after the turnaround, the Rectisol was shut down for another 32 days as repairs were made to a vessel in the upstream shift reaction section of the Gasifier unit.

## Section 8: Regulatory Approvals

No unusual hurdles were encountered throughout the application and approval process for the overall project.

### NWR:

BODY/ACT/ REGULATION	APPROVAL/PERMIT/ DESCRIPTION	UPDATE/NOTES
<b>Oil and Gas Conservation Act</b>	Upgrader Approval No. 10994 dated September 6, 2007 / For construction and Operation of an oil sands bitumen upgrader, no expiry	All Approvals are held by North West Redwater Partnership Holdings Corp.
<b>Environmental Protection and Enhancement Act</b>	Approval No. 217118-00-00 dated September 20, 2007 to construct, operate and reclaim the facility, as amended occasionally to date. Approval expires September 1, 2017. Application for renewal was submitted September 1, 2016, with renewal commitment prior to Sept 1, 2017	The renewal was approved in 2017.
<b>Water Act (Water Licence)</b>	Approval No. 00227771-00-00 as amended occasionally to divert of water from site Precipitation and North Sask River for process. Approval expires September 1, 2017. Application for renewal was submitted September 1, 2016, with renewal commitment prior to Sept 1, 2017	The renewal was approved in 2017
<b>Sturgeon County/Land Use Bylaw 819/96</b>	Development and Building Permits 305-07-D0347 305-07-D0399 305-07-D0609 305-07-D0610 305-08-D0001 305-07-D0611 305-07-D0631	All Development Permits have been initiated and remain valid through to completion of Phase 1
<b>Sturgeon County/The Inspections Group Inc/Safety Codes Act and Codes</b>	Various Safety Codes Permits as required for gas fitting, plumbing, electrical per associate Codes, both for temporary and permanent facilities within the Refinery site. Hundreds of such permits are issued for various buildings and tasks throughout the site, and are considered routine	NWR applied for and is approved by the Safety Codes Council to administer Safety Codes Act approvals required for the Project as at May 2013

<b>Alberta Transportation Highways Development and Protection Act</b>	Alberta Transportation/Highways Development and Protection Act Roadside Development Permit 2511/049/10 and RDP 2511/310/13	RDP 2511/049/10 and RDP 2511/310/13 have been issued in respect of the complete construction and operation of Phase 1 of the Project
<b>Alberta Sustainable Resource Development/Public Lands Act</b>	Temporary Field Authorizations for water course realignment TFA 126500 as issued November 19, 2012	Work under this TFA has been completed
<b>Alberta Community Development/ Historical Resources Act</b>	Clearance Letter (note that this resulted in the AER Public Interest Determination) Release Date: February 1, 2006 Release Date: November 29, 2006	Work under this clearance has been completed
<b>Industry Canada/Radio Communication Act and Regulations</b>	Mobile radio license for use by construction and Operations workforce	No Change
<b>Alberta Energy Regulator – Pipeline Act</b>	Pipeline licenses for lines across North Saskatchewan River as per recent Bennett Jones assistance re applications. Have been issued to NWU	All required Pipeline Licenses have been received and all off-site pipelines installed but not yet operational
<b>Oil and Gas Conservation Act</b>	Upgrader Approval No. 10994 dated September 6, 2007 / For construction and Operation of an oil sands bitumen upgrader, no expiry	All Approvals are held by North West Redwater Partnership Holdings Corp

### Enhance/WCS:

<b>Consent/Permit</b>	<b>General Timeline of Approval Receipt</b>	<b>Additional Hurdles Encountered</b>
<b>Canadian Environmental Assessment Agency (“CEAA”)</b>	Submitted: January 2010 Approved: September 7 <sup>th</sup> , 2010	None
<b>Development Permit (County Level)</b>	Sturgeon County has confirmed that a development permit is not required.	None
<b>Alberta Historical Resources Foundation (“AHRF”)</b>	Submitted: May 13 <sup>th</sup> , 2009 Approved: August 17 <sup>th</sup> , 2012 Approved: July 2, 2015 for routing amendments	On-going routing changes delayed application process
<b>AER Directive 56 Pipeline Installation Approval (includes Alberta Environment approval)</b>	Public consultation process: October 2008 – March 2009 Applied: March 20, 2009 Approved: April 26, 2011  License Number: 53252	On-going consultation required after approval
<b>Conservation Reclamation Plan (Alberta Environment)</b>	Submitted: March 18 <sup>th</sup> , 2009	None



	Approved: April 17 <sup>th</sup> , 2013	
<b>Alberta Energy Regulator (“AER”) (D-65 EOR Scheme)</b>	Draft Application submitted in December 2013, reviewed by AER. Formal application submitted in December 2017. Approval No. 12832 received in December 2018 and amended to 12832B in October 2019. A number of amendments were made in 2020 and 2021, Approval No. 12832H issued in May 2021 being the last one in the year.	None
<b>Alberta Energy Regulator (“AER”)</b>	Minor amendments to transmission and gathering line accepted September 2014; License #53252	None
<b>Alberta Energy Regulator (“AER”)</b>	Minor compressor station (Nutrien Capture Facilities) amendments accepted October 2014; License #53252	None
<b>Alberta Energy Regulator (“AER”)</b>	North Saskatchewan River spare pipeline approved November 2014; License #56775	None
<b>Alberta Energy Regulator (“AER”)</b>	Above ground wastewater pipeline License #56821 Approval extended to December 4, 2018	None
<b>Alberta Energy Regulator (“AER”)</b>	Minor amendments to transmission and gathering line accepted September 2014; Licence #53252	None
<b>Alberta Energy Regulator (“AER”)</b>	Minor compressor station (Nutrien Capture Facilities) amendments accepted October 2014; Licence #53252	None
<b>Alberta Energy Regulator (“AER”)</b>	Above ground low pressure CO <sub>2</sub> source pipeline License #56943 Approval extended to January 9, 2019	None
<b>Alberta Energy Regulator (“AER”)</b>	Spare pipeline under North Saskatchewan River License #56775 Approval	None

	extended to November 21, 2018	
<b>AER Directive 56 Pipeline Installation Approval</b>	Public consultation process: April – June 2019 Applied: June 11, 2019 Approved: June 24, 2019  License Number: 61061	None
<b>AER Directive 56 Pipeline Installation Approval</b>	Public consultation process: April – June 2019 Applied: June 11, 2019 Approved: June 24, 2019  License Number: 61062	None
<b>AER Directive 56 Pipeline Installation Approval</b>	Public consultation process: April – June 2019 Applied: June 11, 2019 Approved: June 24, 2019  License Number: 61063	None
<b>Environmental Enhancement and Protection Act (EPEA)</b>	Applied: April 5, 2019. Approved: April 9, 2019. Approval no. 253976-00-00 extended to April 17, 2020. Approval 253976-00-00 was renewed by the Alberta Energy Regulator as Approval 253976-01-00, which carries a new expiry date of January 31, 2025.	None
Alberta Energy Regulator (“AER”)	Minor amendments to transmission and gathering line accepted September 2014; Licence #53252	None
AER Directive 56 Pipeline Installation Approval	Public consultation process: April – June 2019 Applied: June 14, 2019 Approved: June 27, 2019  License Number: 61067	None
AER Directive 56 Pipeline Installation Approval	Public consultation process: April – June 2019 Applied: June 14, 2019 Approved: July 11, 2019 Amended for system expansion: May 10, 2022	None

	License Number: 61114	
AER Directive 56 Pipeline Installation Approval	Public consultation process: April – June 2019 Applied: June 14, 2019 Approved: July 11, 2019 Amended for system expansion: December 2, 2020  License Number: 61115	None
AER Directive 56 Pipeline Installation Approval	Public consultation process: April – May 2019 Applied: June 17, 2019 Approved: June 25, 2019  License Number: F8154	None
Environmental Enhancement and Protection Act (EPEA)	Applied: April 5, 2019. Approved: April 9, 2019. Approval no. 253976-00-00 extended to April 17, 2020	Amended to Approval No. 00253976-01-00 and extended to Jan 31, 2025
Measurement, Monitoring and Verification (MMV) Plan as required by CCS Funding Agreement – The Alberta Carbon Trunk Line, September 24, 2010 and subsequent amendments	Applied May 2018 and July 2019. Approved November 2019. Updated plan approved by Alberta Energy April 2021.	Original plan required updates to geomechanical studies which were completed and approved. Updated plan covers flood area expansion; no issues.

The project partners will continue to re-apply for any required permits that may expire and for any permits required for expansions (primarily related to expansion of the CO<sub>2</sub> EOR and storage project at Clive).

## Section 9: Public Engagement

Historical consultations are documented in Section 9 of previous versions of this report. Activities in 2022 are documented below.

### Enhance

Enhance’s stakeholder communications focus in 2022 was on landowners directly impacted by construction and drilling activities, and the 2022 MMV program. A planned public open house in October was cancelled due to poor weather conditions making travel unsafe.

### WCS

Wolf continued to maintain contact with landowners to close off any historical issues and inquire if any others may have arisen since last contact.

Following spring breakup 2022, Wolf was contacted by a handful of stakeholders who indicated that areas along the ACTL right of way required touch-up work. In response, Wolf collaborated with these stakeholders through the summer to conduct minor surface repairs to the right of way to the satisfaction of the landowners.

## NWR

NWR was re-opened to hosting refinery tours in 2022 following COVID restrictions.

### NWR: 2022 Schedule of Site Tours and Knowledge Sharing Presentations

Month	Activity	Audience
March	Canadian Fuels Association meeting and tour	Refining industry
May	Strathcona Library – virtual tour and presentation	Public
June	Strathcona County council tour	Government
September	Carbon Capture Canada conference – presentation	Public, industry
November	Grade 9 Students – tour	Community,
November	Hosted the world LC Finer forum	Industry
November	Hosted the APMC Board meeting and provided a tour	Government

## Section 10: Costs and Revenues

### Costs

#### ACTL and Clive EOR and Storage

##### CAPEX

Capital Cost Estimates	Total (\$MM)	Spend to Date (\$MM)	Forecast to Complete (\$MM)
Plant #1 Tie-In	\$8.2	\$6.6	\$1.6
RCRU	\$68	\$68	\$0
SCS and NWR CRU	\$95	\$95	\$0
Pipeline	\$326	\$326	\$0
Clive CO <sub>2</sub> Injection	\$108	\$57	\$51
Total	\$605.2	\$552.6	\$52.6

Table 4 - Enhance/WCS Capital Costs

Costs spent on the system through the end of 2022 are shown above. The CRU's, SCS and pipeline are complete; no further CAPEX is expected. Additional CAPEX will be spent at Clive as the CO<sub>2</sub> EOR and storage area expands with future development.

Work began in 2022 to tie-in the Nutrien Plant #1 CO<sub>2</sub> supply to the RCRU as contemplated in the original Project Funding Proposal. Costs for this work are shown as a separate line item. This project entails installation of an electrically driven blower and associated inlet and outlet piping to move CO<sub>2</sub> rich off-gas from Plant #1 to the existing RCRU. Currently installed dehydration and compression equipment at the RCRU does not require

modification based on expected output from the existing Nutrien supply and the added Plant #1 volumes. Plot plans, process flow diagrams, heat and material balance and project schedule are included in Appendix IX of the Detailed report. The project is scheduled to be completed in 2023.

### OPEX

Actual operating costs for 2022 and 2023 estimates are presented below.

Project Component	2022 Operating Cost Actual (\$mm)	2023 Operating Cost Estimated (\$mm)
<b>RCRU (including disposal well) and NWR CRU</b>		
Energy	\$15.68	\$21.78
Maintenance and Repair	\$1.61	\$1.53
Labour, Regulatory, Administration	\$0.49	\$0.44
Maintenance Capital and Turnaround	\$0.08	\$-
<b>Sub-Total</b>	<b>\$17.86</b>	<b>\$23.75</b>
<b>SCS and ACTL</b>		
Energy	\$7.67	\$10.51
Maintenance and Repair	\$2.00	\$1.67
Labour, Regulatory, Administration	\$0.81	\$2.71
Maintenance Capital and Turnaround	\$1.29	\$1.2
<b>Sub-Total</b>	<b>\$11.77</b>	<b>\$16.08</b>
<b>Storage (Clive)</b>		
Energy	\$6.36	\$6.64
Maintenance and Repair	\$2.33	\$2.43
Labour, Regulatory, Administration	\$1.26	\$1.31
Monitoring, Measurement and Verification	\$1.16	\$2.24
<b>Sub-Total</b>	<b>\$11.11</b>	<b>\$12.62</b>
<b>TOTAL</b>	<b>\$40.74</b>	<b>\$52.45</b>

Table 5- Operating Costs- CRU's, SCS, ACTL and Storage

### NWR Rectisol®

#### **NWR Rectisol® Unit**

The Rectisol® capital cost (actual) is shown in Table 6. Table 7 shows the operating cost of the Rectisol Unit.

### CAPEX

<b>DBM/EDS Engineering</b>	\$6.1
<b>Detailed Engineering</b>	\$65.8
<b>Equipment &amp; Material</b>	\$176.1
<b>Construction, Commissioning &amp; Startup</b>	\$134.4
<b>Total</b>	<b>\$382.4</b>

Table 6 - Rectisol® Capital Costs

## OPEX

Actual OPEX for 2022 and 2023 estimate is shown in Table 7 following.

Project Component	2022 Operating Cost Actual (\$mm)	2023 Operating Cost Estimated (\$mm)
<b>Rectisol® Unit</b>		
Energy	\$9.55	\$14.37
Maintenance and Repair	\$9.83	\$2.13
Labour, Regulatory, Administration	\$3.39	\$3.53
<b>Total</b>	<b>\$22.77</b>	<b>\$20.03</b>

Table 7- Rectisol Operating Costs

The levelized supply cost per tonne of CO<sub>2</sub> captured and avoided has been calculated using methodology developed by Alberta Energy at \$109.49/tonne and \$120.23/tonne respectively. These costs include the Rectisol® unit at a CAPEX of \$13.00/tonne and \$14.21/tonne and OPEX of \$21.27/tonne and \$23.24/tonne respectively. This unit provides H<sub>2</sub>S removal and hydrogen for NWR Sturgeon refinery processes as well as CO<sub>2</sub> for the ACTL project. See Section 6.1.1.3 of the 2022 detailed report.

The ACTL pipeline itself shows a levelized supply cost per tonne of CO<sub>2</sub> captured and avoided of CAPEX \$15.88/tonne and \$17.44/tonne and OPEX of \$13.82/tonne and \$15.18/tonne respectively. The ACTL is designed for an ultimate capacity of up to 14.6 million tonnes of CO<sub>2</sub> per year, which represents approximately 20% of all current oil sands emissions or is equal to the impact of capturing the CO<sub>2</sub> from more than 2.6 million cars in Alberta. Current deliveries to Clive represent a fraction of this capacity at approximately 1 million tonnes per year in 2022.

## Revenues

Enhance and NWR have received \$63mm of Federal funding through the ecoETI and CEF programs to date. NWR and Enhance have received \$326mm of Provincial funding under the ACTL CCS agreement to YE 2022. A total of \$169mm remains to be disbursed to NWR and Enhance as annual payments under the Remaining Collective Funding provisions of the Provincial funding agreement. Payments are calculated based on net CO<sub>2</sub> stored in the preceding year. NWR received \$3.81 mm and Enhance received \$11.44 mm in 2022 based on net CO<sub>2</sub> stored from the start of Commercial Operations in 2020. The Project also received \$3.05 mm funding in 2022 through the Provincial Sector-specific Industrial Energy Efficiency (SIEE) Program to partially offset costs of the Nutrien Plant #1 tie-in.

The Project is also eligible for offset credits through the TIER program and has pursued registration of these credits during 2020-2022. Details can be found at [https://alberta.csaregistrries.ca/GHGR\\_Listing/AEOR\\_ListingDetail.aspx?ProjectId=157](https://alberta.csaregistrries.ca/GHGR_Listing/AEOR_ListingDetail.aspx?ProjectId=157).

Revenue generated through the offset credits from the Project are commercial confidential.

## Section 11: Project Timeline

### Enhance/WCS ACTL Timeline

Activities associated with construction and commissioning are complete, specifically:

- RCRU was commissioned and began filling the ACTL in December 2019
- CO<sub>2</sub> delivery to the Clive field began in February 2020
- Clive CO<sub>2</sub>-EOR and Storage- began injecting CO<sub>2</sub> in February 2020. MMV activities will be an ongoing process as will expansion of the CO<sub>2</sub> EOR and storage area at Clive as the existing EOR area matures and recycle volumes increase.
- NWR CRU and SCS- began supplying CO<sub>2</sub> to the ACTL in March 2020
- Commercial Operation was achieved in May 2020

A pre-commissioning timeline is available in 2019 Knowledge Sharing Report.

### NWR Timeline

Funding for Milestone# 1 was achieved in September 2015, Milestone #2 was achieved in June 2017, and Milestone # 3 was achieved in early Q2 2018. Commencement of CO<sub>2</sub> deliveries to Enhance occurred calendar Q1 2020 and Milestone # 4 was achieved in Q2, 2020.

## Section 12: General Project Assessment

### Successes and Learnings Arising from the Project

The ACTL project is expected to encourage the development of an eco-industrial petrochemical cluster of additional value-added upgrading, refining, and petrochemicals projects that take advantage of sustainable and cost-effective solutions for CO<sub>2</sub> emissions. Now that it is operational, the ACTL is strategically positioned to launch an integrated CCS sector and establish Alberta as a globally recognized leader for CCS and EOR technology. To date, the project has been successful in passing through key commercial, public consultation, regulatory, financial, design and construction hurdles. Enhance, WCS and NWR plan to build on these successes as the project continues to demonstrate an effective solution to CO<sub>2</sub> emissions during the operation phase.

The ACTL was developed in anticipation of future tightening environmental requirements for large emitters. The regulatory landscape has evolved since 2010 such that the demonstration project will in fact yield meaningful economic returns in addition to environmental benefits to its stakeholders.

#### *Landowner Acceptance*

There are approximately 400 landowners along the ACTL who have been externally supportive of the project. This is a significant achievement, and it highlights public support for the ACTL. Enhance and WCS's strong commitment to community engagement is evident in the fact that landowners supported the pipeline being built underneath their land. This level of acceptance occurs once all community questions and concerns have been adequately addressed and risks have been shown to be minimal. As with any major project, construction of the ACTL temporarily impacted stakeholder activities. Concerns received by the project team were actioned promptly, and over 99% of the landowners have signed off on the final state of the project lands as of year-end 2022. Wolf continues to engage with the few remaining landowners to settle construction nuisance claims.

#### *Procurement of Major Equipment*

All major equipment is in place and operating.

### *Regulatory Approvals in Place for Pipeline*

The required regulatory approvals are in place for the project.

### *Achievement of the Project's Milestones*

See Section 10.

### *Knowledge Sharing*

Enhance, WCS and NWR have committed to provide updates and deliver presentations to the community, industry and government in order to promote awareness about the ACTL project and highlight its benefits to a wide audience. As part of this commitment, Enhance, WCS and NWR have spent considerable time preparing knowledge sharing reports for the provincial and federal governments and the general public, presenting at various events and touring groups through Project facilities.

Details can be found in Section 4.2 of the Detailed Knowledge Sharing report.

### *Government Funding*

See “[Revenues](#)” in Section 10.

### *Electricity Power Requirements*

All facilities associated with the project obtain power from connection to the Alberta grid.

### *Direct Economic Benefits to Alberta*

The ACTL has had a direct economic impact in Alberta, through the creation of jobs and procurement of equipment. These benefits are measured in terms of person-hours expended and equipment manufactured in the Province. Approximately 2,234,000 person-hours were expended to the start of commercial operations on construction activities for the project. Peak workforce on the project included almost 2000 persons working on the ACTL and capture facilities in February 2019 and another 195 working at Clive drilling new injection and disposal wells, re-completing and zonally abandoning existing wells and installing pipelines and upgrading facilities throughout the year. Presently, there are approximately 75 permanent positions as a result of the ACTL project, with additional positions to be created as further EOR and storage sites are developed.

Enhance and WCS remain committed to supporting Alberta businesses. Direct efforts have been made to keep the majority of work in the Province; see Appendix C.

### *Economic Benefit to Canada and Opportunity to Build Expertise*

Two major pieces of equipment for the RCRU (inlet condenser and the CO<sub>2</sub> booster pump) were procured from Ontario. The majority of the pipe used in the ACTL (other than some specialized heavy wall sections and the larger 24” pipe) was fabricated at the Evraz manufacturing facility in Camrose, Alberta. The 24” pipe was manufactured in Saskatchewan, and all pipe was coated at the Shawcor facility in Camrose, Alberta. Three of the four pipeline construction contractors are Alberta based and the fourth is based in Saskatchewan. Canadian content utilized through the construction of the ACTL system exceeded 90% of aggregate costs.

The only major equipment procured outside Canada were three CO<sub>2</sub> compressors that are based on the same compression technology purchased from Germany. A Canadian manufactured compressor would have been preferred; however, the technology and manufacturing capability has been built up in Germany over 50 years and is hard to replicate.



### *Indirect Economic Benefits of the Project for Alberta and Canada*

Enhance commissioned the Canadian Energy Research Institute (CERI) to conduct a study on the economic impact of the ACTL project in 2009. CERI uses an Input-Output (“IO”) model based on StatsCan data to estimate economic impacts of investments (input) and production (output). The study has not been updated but it was estimated at the time that, at full capacity the ACTL project will create \$15 billion in royalty revenue for the Alberta government over the next 30 years by capturing CO<sub>2</sub> from large emitters in the Alberta Industrial Heartland and using it to develop EOR potential in mature east-central Alberta oil pools. The study estimated that overall integrated project, at design capacity, could increase Canada’s total economic output by \$231 billion (approximately 80% of the impact in Alberta) and provide an additional 848,800 person-years of employment (approximately 70% of the impact in Alberta).

CERI estimated ongoing job creation as the ACTL system expands to full capacity to run in the tens of thousands.

## Section 13: Next Steps

All components of the project are operating. The current focus for all parties is to ensure continued, safe operation of the current system. As the ACTL has excess capacity relative to demands at Clive, Enhance and WCS are seeking additional supply and potential CO<sub>2</sub>-EOR and/or storage customers.

Enhance continues its focus on safe and efficient operation of the Clive CO<sub>2</sub> EOR and storage project including ongoing monitoring related to the MMV plan. As the current CO<sub>2</sub> flood area matures, Enhance will apply for AER approval to expand operations through the remainder of the reservoirs at Clive.

With easing of COVID restrictions in 2022, Enhance plans more person-to-person visits with landowners and residents in the area. Enhance also plans to hold an open house in June.

### Changes in the Project Plan and Timeline

All components of the Project are now operating.



*Clive CO<sub>2</sub> Injection Well*



Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	689.48	8469.6	12,054.0	11,419.9	22,440	21,259	94.74%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	649.00	8397.6	12,441.2	11,794.1	23,160	21,956	94.80%
Clive Inj 06-02 Pad 00/01-03 Gas Mtr - 006-FIT-0004A	396.14	6178.1	5,511.6	5,214.3	10,260	9,707	94.61%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	681.68	9622.5	10,568.4	10,012.4	19,674	18,639	94.74%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	683.85	9044.8	15,168.0	14,382.9	28,237	26,775	94.82%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	657.09	9053.8	13,836.6	13,139.3	25,758	24,460	94.96%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	617.52	9338.4	9,496.7	9,016.2	17,679	16,785	94.94%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	500.33	6849.7	9,126.4	8,651.1	16,990	16,105	94.79%
<b>Average</b>			<b>2,845.3</b>	<b>2,697.7</b>	<b>5,297</b>	<b>5,022</b>	<b>94.82%</b>
Total			88,202.9	83,630.0	164,198	155,686	94.82%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	648.73	11324.6	48,328.8	48,058.8	89,969	89,466	99.44%
<b>Average</b>			<b>1,559.0</b>	<b>1,550.3</b>	<b>2,902</b>	<b>2,886</b>	<b>99.44%</b>
Total			48,328.8	48,058.8	89,969	89,466	99.44%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	668.06	0.0	37,525.8	33,355.1	69,858	62,094	88.89%
<b>Average</b>			<b>1,210.5</b>	<b>1,076.0</b>	<b>2,253</b>	<b>2,003</b>	<b>88.89%</b>
Total			37,525.8	33,355.1	69,858	62,094	88.89%

<b>Total Injection (e3m3)</b>	<b>88,202.9</b>
<b>Total Delivery (e3m3)</b>	<b>85,854.6</b>
<b>Proration</b>	<b>102.7%</b>

Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	663.67	8503.9	13,538.3	12,798.8	25,203	23,826	94.54%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	661.98	8522.5	13,489.0	12,751.4	25,111	23,738	94.53%
Clive Inj 06-02 Pad 00/01-03 Gas Mtr - 006-FIT-0004A	16.15	352.8	393.2	373.3	732	695	94.94%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	671.58	9891.2	11,837.1	11,193.5	22,036	20,838	94.56%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	671.85	9042.1	16,407.5	15,513.4	30,544	28,880	94.55%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	671.85	9087.1	15,002.9	14,187.4	27,929	26,411	94.56%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	525.91	7022.1	7,789.5	7,365.0	14,501	13,711	94.55%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	670.80	9455.8	13,176.3	12,461.5	24,529	23,198	94.58%
<b>Average</b>			<b>3,272.6</b>	<b>3,094.4</b>	<b>6,092</b>	<b>5,761</b>	<b>94.55%</b>
Total			91,633.8	86,644.3	170,585	161,297	94.55%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	647.63	11937.5	53,480.9	52,871.0	99,560	98,425	98.86%
<b>Average</b>			<b>1,910.0</b>	<b>1,888.3</b>	<b>3,556</b>	<b>3,515</b>	<b>98.86%</b>
Total			53,480.9	52,871.0	99,560	98,425	98.86%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	665.95	0.0	37,961.0	33,592.4	70,668	62,536	88.49%
<b>Average</b>			<b>1,355.7</b>	<b>1,199.7</b>	<b>2,524</b>	<b>2,233</b>	<b>88.49%</b>
Total			37,961.0	33,592.4	70,668	62,536	88.49%

<b>Total Injection (e3m3)</b>	<b>91,633.8</b>
<b>Total Delivery (e3m3)</b>	<b>91,441.8</b>
<b>Proration</b>	<b>100.2%</b>

Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	716.48	8620.6	13,446.1	12,859.3	25,031	23,939	95.64%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	714.71	8661.2	12,772.1	12,198.0	23,777	22,708	95.50%
Clive Inj 06-02 Pad 00/01-03 Gas Meter - 006-FIT-0004A	743.55	9652.6	15,193.7	14,555.4	28,285	27,096	95.80%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	742.43	9655.2	13,708.6	13,125.7	25,520	24,435	95.75%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	575.10	8388.8	13,655.2	13,043.5	25,420	24,282	95.52%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	648.90	9196.4	14,078.4	13,455.3	26,208	25,048	95.57%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	3.22	298.9	94.0	89.4	175	166	95.15%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	744.00	9481.3	14,680.0	14,057.6	27,328	26,170	95.76%
<b>Average</b>			<b>3,149.3</b>	<b>3,012.4</b>	<b>5,863</b>	<b>5,608</b>	<b>95.65%</b>
Total			97,628.1	93,384.3	181,745	173,844	95.65%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	739.84	11591.5	59,903.7	59,616.2	111,517	110,982	99.52%
<b>Average</b>			<b>1,932.4</b>	<b>1,923.1</b>	<b>3,597</b>	<b>3,580</b>	<b>99.52%</b>
Total			59,903.7	59,616.2	111,517	110,982	99.52%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	740.43	0.0	39,207.7	35,214.1	72,989	65,554	89.81%
<b>Average</b>			<b>1,264.8</b>	<b>1,135.9</b>	<b>2,354</b>	<b>2,115</b>	<b>89.81%</b>
Total			39,207.7	35,214.1	72,989	65,554	89.81%

<b>Total Injection (e3m3)</b>	<b>97,628.1</b>
<b>Total Delivery (e3m3)</b>	<b>99,111.5</b>
<b>Proration</b>	<b>98.5%</b>

Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	720.00	8536.3	15,208.6	14,562.9	28,312	27,110	95.75%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	718.12	8258.1	15,245.3	14,601.4	28,381	27,182	95.78%
Clive Inj 06-02 Pad 00/01-03 Gas Meter - 006-FIT-0004A	718.02	9358.0	14,619.3	14,006.8	27,215	26,075	95.81%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	720.00	9669.8	15,550.6	14,894.1	28,949	27,727	95.78%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	559.50	8101.0	13,477.2	12,878.7	25,089	23,975	95.56%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	566.97	7933.7	12,475.5	11,923.3	23,224	22,196	95.57%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	0.00	0.0	0.0	0.0	0	0	0.00%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	720.00	9165.3	15,004.1	14,371.4	27,932	26,754	95.78%
<b>Average</b>			<b>3,386.0</b>	<b>3,241.3</b>	<b>6,303</b>	<b>6,034</b>	<b>95.73%</b>
Total			101,580.5	97,238.8	189,102	181,020	95.73%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	719.87	11806.0	66,234.1	65,811.9	123,301	122,515	99.36%
<b>Average</b>			<b>2,207.8</b>	<b>2,193.7</b>	<b>4,110</b>	<b>4,084</b>	<b>99.36%</b>
Total			66,234.1	65,811.9	123,301	122,515	99.36%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	718.66	0.0	35,445.8	31,521.9	65,986	58,681	88.93%
<b>Average</b>			<b>1,181.5</b>	<b>1,050.7</b>	<b>2,200</b>	<b>1,956</b>	<b>88.93%</b>
Total			35,445.8	31,521.9	65,986	58,681	88.93%

<b>Total Injection (e3m3)</b>	<b>101,580.5</b>
<b>Total Delivery (e3m3)</b>	<b>101,679.8</b>
<b>Proration</b>	<b>99.9%</b>

Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	744.00	8340.4	13,407.5	12,795.6	24,959	23,820	95.44%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	744.00	8309.2	12,883.8	12,295.5	23,984	22,889	95.43%
Clive Inj 06-02 Pad 00/01-03 Gas Meter - 006-FIT-0004A	743.92	9345.2	17,590.6	16,792.4	32,747	31,261	95.46%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	744.00	9339.7	17,076.5	16,303.6	31,790	30,351	95.47%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	744.00	8710.1	18,132.3	17,304.6	33,755	32,214	95.44%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	744.00	8779.9	15,700.8	14,984.6	29,229	27,895	95.44%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	0.00	0.0	0.0	0.0	0	0	0.00%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	744.00	9085.4	18,063.7	17,244.8	33,627	32,103	95.47%
<b>Average</b>			<b>3,640.5</b>	<b>3,474.9</b>	<b>6,777</b>	<b>6,469</b>	<b>95.45%</b>
Total			112,855.1	107,720.9	210,091	200,533	95.45%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	743.46	11871.5	68,707.9	68,280.6	127,907	127,111	99.38%
<b>Average</b>			<b>2,216.4</b>	<b>2,202.6</b>	<b>4,126</b>	<b>4,100</b>	<b>99.38%</b>
Total			68,707.9	68,280.6	127,907	127,111	99.38%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	743.95	0.0	44,618.9	39,893.3	83,062	74,265	89.41%
<b>Average</b>			<b>1,439.3</b>	<b>1,286.9</b>	<b>2,679</b>	<b>2,396</b>	<b>89.41%</b>
Total			44,618.9	39,893.3	83,062	74,265	89.41%

<b>Total Injection (e3m3)</b>	<b>112,855.1</b>
<b>Total Delivery (e3m3)</b>	<b>113,326.8</b>
<b>Proration</b>	<b>99.6%</b>

Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	719.97	8094.9	15,152.5	14,180.3	28,208	26,398	93.58%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	720.00	8094.4	13,124.9	12,272.2	24,433	22,846	93.50%
Clive Inj 06-02 Pad 00/01-03 Gas Meter - 006-FIT-0004A	711.00	9441.7	14,804.1	13,861.5	27,559	25,805	93.63%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	719.25	9374.0	15,316.5	14,336.2	28,513	26,688	93.60%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	719.10	8743.1	16,289.4	15,253.2	30,324	28,395	93.64%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	718.52	8777.6	19,561.6	18,314.8	36,416	34,095	93.63%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	0.00	0.0	0.0	0.0	0	0	0.00%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	662.72	8924.7	14,790.1	13,864.3	27,533	25,810	93.74%
<b>Average</b>			<b>3,634.6</b>	<b>3,402.8</b>	<b>6,766</b>	<b>6,335</b>	<b>93.62%</b>
Total			109,039.1	102,082.6	202,987	190,037	93.62%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	718.79	11771.1	62,160.7	61,367.0	115,718	114,241	98.72%
<b>Average</b>			<b>2,072.0</b>	<b>2,045.6</b>	<b>3,857</b>	<b>3,808</b>	<b>98.72%</b>
Total			62,160.7	61,367.0	115,718	114,241	98.72%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	705.20	0.0	43,554.2	37,600.3	81,080	69,997	86.33%
<b>Average</b>			<b>1,451.8</b>	<b>1,253.3</b>	<b>2,703</b>	<b>2,333</b>	<b>86.33%</b>
Total			43,554.2	37,600.3	81,080	69,997	86.33%

<b>Total Injection (e3m3)</b>	<b>109,039.1</b>
<b>Total Delivery (e3m3)</b>	<b>105,714.9</b>
<b>Proration</b>	<b>103.1%</b>



Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
	0.00	0.0	0.0	0.0	0	0	0.00%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	744.00	7922.3	15,629.2	14,752.2	29,095	27,463	94.39%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	744.00	7915.7	14,750.4	13,923.1	27,459	25,919	94.39%
Clive Inj 06-02 Pad 00/01-03 Gas Meter - 006-FIT-0004A	742.52	9257.8	16,407.5	15,487.2	30,544	28,831	94.39%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	744.00	9223.2	17,334.3	16,363.0	32,270	30,461	94.40%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	735.23	8623.9	15,430.3	14,562.1	28,725	27,109	94.37%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	732.47	8631.1	15,573.0	14,696.7	28,991	27,359	94.37%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	0.00	0.0	0.0	0.0	0	0	0.00%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	744.00	8966.3	16,629.7	15,697.1	30,958	29,222	94.39%
<b>Average</b>			<b>3,605.0</b>	<b>3,402.6</b>	<b>6,711</b>	<b>6,334</b>	<b>94.39%</b>
Total			111,754.3	105,481.6	208,042	196,364	94.39%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	744.00	11827.0	70,202.9	69,709.7	130,690	129,772	99.30%
<b>Average</b>			<b>2,264.6</b>	<b>2,248.7</b>	<b>4,216</b>	<b>4,186</b>	<b>99.30%</b>
Total			70,202.9	69,709.7	130,690	129,772	99.30%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	717.45	0.0	42,390.0	36,563.3	78,913	68,066	86.25%
<b>Average</b>			<b>1,367.4</b>	<b>1,179.5</b>	<b>2,546</b>	<b>2,196</b>	<b>86.25%</b>
Total			42,390.0	36,563.3	78,913	68,066	86.25%

<b>Total Injection (e3m3)</b>	<b>111,754.3</b>
<b>Total Delivery (e3m3)</b>	<b>112,592.8</b>
<b>Proration</b>	<b>99.3%</b>

Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	512.54	7235.4	8,050.6	7,412.9	14,987	13,800	92.08%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	713.21	8905.8	13,031.4	11,823.8	24,259	22,011	90.73%
Clive Inj 06-02 Pad 00/01-03 Gas Meter - 006-FIT-0004A	474.75	5701.3	6,017.4	5,585.7	11,202	10,398	92.83%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	811.45	9651.2	9,396.1	8,624.7	17,492	16,056	91.79%
Clive Inj 08-09 Pad 02/16-10 Gas Meter - 017-FIT-0006	0.00	0.0	0.0	0.0	0	0	0.00%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	741.04	9289.1	12,064.1	10,966.0	22,459	20,414	90.90%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	740.41	9296.3	11,084.6	10,095.8	20,635	18,794	91.08%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	0.00	2.2	0.0	0.0	0	0	0.00%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	633.24	9484.1	12,270.9	11,219.2	22,844	20,886	91.43%
<b>Average</b>			<b>2,319.8</b>	<b>2,120.3</b>	<b>4,319</b>	<b>3,947</b>	<b>91.40%</b>
Total			71,915.1	65,728.1	133,877	122,359	91.40%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	711.85	10821.1	24,924.9	24,831.5	46,400	46,226	99.63%
<b>Average</b>			<b>804.0</b>	<b>801.0</b>	<b>1,497</b>	<b>1,491</b>	<b>99.63%</b>
Total			24,924.9	24,831.5	46,400	46,226	99.63%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	741.03	0.0	45,737.8	39,782.7	85,146	74,059	86.98%
<b>Average</b>			<b>1,475.4</b>	<b>1,283.3</b>	<b>2,747</b>	<b>2,389</b>	<b>86.98%</b>
Total			45,737.8	39,782.7	85,146	74,059	86.98%

<b>Total Injection (e3m3)</b>	<b>71,915.1</b>
<b>Total Delivery (e3m3)</b>	<b>70,662.7</b>
<b>Proration</b>	<b>101.8%</b>

Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	716.05	10083.2	5,104.0	4,556.9	9,502	8,483	89.28%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	717.92	4121.2	5,998.3	5,352.0	11,166	9,963	89.23%
Clive Inj 06-02 Pad 00/01-03 Gas Meter - 006-FIT-0004A	118.08	(11.6)	8.4	7.5	16	14	88.96%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	170.45	10305.6	1,087.3	975.4	2,024	1,816	89.71%
Clive Inj 08-09 Pad 02/16-10 Gas Meter - 017-FIT-0006	687.09	32.0	28,744.7	25,660.2	53,511	47,769	89.27%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	278.49	10216.3	2,429.5	2,168.9	4,523	4,038	89.27%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	277.33	10250.6	2,116.5	1,889.4	3,940	3,517	89.27%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	0.00	9.7	0.0	0.0	0	0	0.00%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	762.92	10368.1	8,206.0	7,325.1	15,276	13,636	89.27%
<b>Average</b>			<b>1,789.8</b>	<b>1,597.8</b>	<b>3,332</b>	<b>2,975</b>	<b>89.27%</b>
Total			53,694.8	47,935.3	99,958	89,236	89.27%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	473.27	10357.0	6,870.4	6,787.5	12,790	12,636	98.79%
<b>Average</b>			<b>229.0</b>	<b>226.3</b>	<b>426</b>	<b>421</b>	<b>98.79%</b>
Total			6,870.4	6,787.5	12,790	12,636	98.79%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	715.07	0.0	45,187.8	39,698.3	84,122	73,902	87.85%
<b>Average</b>			<b>1,506.3</b>	<b>1,323.3</b>	<b>2,804</b>	<b>2,463</b>	<b>87.85%</b>
Total			45,187.8	39,698.3	84,122	73,902	87.85%

<b>Total Injection (e3m3)</b>	<b>53,694.8</b>
<b>Total Delivery (e3m3)</b>	<b>52,058.2</b>
<b>Proration</b>	<b>103.1%</b>

Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	684.15	10004.9	6,627.0	5,950.2	12,337	11,077	89.79%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	688.60	6260.4	7,101.2	6,395.7	13,220	11,906	90.06%
Clive Inj 06-02 Pad 00/01-03 Gas Meter - 006-FIT-0004A	0.00	(10.4)	0.0	0.0	0	0	0.00%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	0.05	8811.3	0.0	0.0	0	0	0.00%
Clive Inj 08-09 Pad 02/16-10 Gas Meter - 017-FIT-0006	478.90	3756.9	26,812.0	24,242.4	49,913	45,130	90.42%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	421.63	10234.7	5,611.2	5,050.2	10,446	9,401	90.00%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	421.63	10340.3	5,326.3	4,784.2	9,915	8,906	89.82%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	0.00	10.9	0.0	0.0	0	0	0.00%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	602.97	10318.3	7,222.4	6,504.9	13,445	12,110	90.07%
<b>Average</b>			<b>1,893.6</b>	<b>1,707.3</b>	<b>3,525</b>	<b>3,178</b>	<b>90.17%</b>
Total			58,700.2	52,927.5	109,276	98,530	90.17%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	345.66	10272.4	12,589.2	12,434.4	23,436	23,148	98.77%
<b>Average</b>			<b>406.1</b>	<b>401.1</b>	<b>756</b>	<b>747</b>	<b>98.77%</b>
Total			12,589.2	12,434.4	23,436	23,148	98.77%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	743.62	0.0	45,505.5	39,965.6	84,713	74,400	87.83%
<b>Average</b>			<b>1,467.9</b>	<b>1,289.2</b>	<b>2,733</b>	<b>2,400</b>	<b>87.83%</b>
Total			45,505.5	39,965.6	84,713	74,400	87.83%

<b>Total Injection (e3m3)</b>	<b>58,700.2</b>
<b>Total Delivery (e3m3)</b>	<b>58,094.7</b>
<b>Proration</b>	<b>101.0%</b>

Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	170.32	9606.3	3,613.1	3,407.4	6,726	6,343	94.31%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	149.21	9584.8	3,138.3	2,959.5	5,842	5,509	94.30%
Clive Inj 06-02 Pad 00/01-03 Gas Meter - 006-FIT-0004A	0.00	(7.4)	0.0	0.0	0	0	0.00%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	583.86	9649.0	4,089.3	3,705.0	7,613	6,897	90.60%
Clive Inj 08-09 Pad 02/16-10 Gas Meter - 017-FIT-0006	714.80	9635.9	22,542.1	20,678.2	41,964	38,494	91.73%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	704.60	9738.4	11,303.6	10,280.3	21,043	19,138	90.95%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	642.22	9404.0	7,586.5	6,848.1	14,123	12,748	90.27%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	650.67	9135.7	11,010.8	10,022.7	20,498	18,658	91.03%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	51.15	1286.1	742.1	654.5	1,381	1,218	88.19%
<b>Average</b>			<b>2,134.2</b>	<b>1,951.9</b>	<b>3,973</b>	<b>3,634</b>	<b>91.46%</b>
Total			64,025.9	58,555.7	119,191	109,007	91.46%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	616.64	10097.9	21,693.3	21,384.3	40,384	39,809	98.58%
<b>Average</b>			<b>723.1</b>	<b>712.8</b>	<b>1,346</b>	<b>1,327</b>	<b>98.58%</b>
Total			21,693.3	21,384.3	40,384	39,809	98.58%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	704.86	0.0	42,164.9	37,033.5	78,494	68,941	87.83%
<b>Average</b>			<b>1,405.5</b>	<b>1,234.4</b>	<b>2,616</b>	<b>2,298</b>	<b>87.83%</b>
Total			42,164.9	37,033.5	78,494	68,941	87.83%

<b>Total Injection (e3m3)</b>	<b>64,025.9</b>
<b>Total Delivery (e3m3)</b>	<b>63,858.2</b>
<b>Proration</b>	<b>100.3%</b>

Location	Time On (hrs)	Pressure (kpa)	Clive CO2 Injection				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Inj 02-26 Pad 00/11-25 Gas Meter - 013-FIT-0010B	737.17	8638.6	16,151.2	15,289.6	30,067	28,463	94.67%
Clive Inj 02-26 Pad 02/02-22 Gas Meter - 013-FIT-0010A	742.53	8553.6	16,575.3	15,681.0	30,857	29,192	94.60%
Clive Inj 06-02 Pad 00/01-03 Gas Meter - 006-FIT-0004A	0.00	(4.4)	0.0	0.0	0	0	0.00%
Clive Inj 06-02 Pad 03/16-02 Gas Meter - 006-FIT-0004B	591.34	8161.4	10,001.8	9,441.9	18,619	17,577	94.40%
Clive Inj 08-09 Pad 02/16-10 Gas Meter - 017-FIT-0006	358.62	6417.6	20,299.9	19,140.7	37,790	35,632	94.29%
Clive Inj 15-26 Pad 00/01-27 Gas Meter - 011-FIT-0010A	742.45	9358.8	16,079.6	15,229.1	29,934	28,351	94.71%
Clive Inj 15-26 Pad 02/11-36 Gas Meter - 011-FIT-0010B	650.57	7854.3	9,918.1	9,356.3	18,464	17,418	94.34%
Clive Inj 15-35 Pad 00/01-34 Gas Meter - 009-FIT-0010B	736.72	9626.4	17,415.6	16,484.6	32,421	30,688	94.65%
Clive Inj 15-35 Pad 02/06-01 Gas Meter - 009-FIT-0010A	0.00	140.3	0.0	0.0	0	0	0.00%
<b>Average</b>			<b>3,433.6</b>	<b>3,245.9</b>	<b>6,392</b>	<b>6,043</b>	<b>94.53%</b>
Total			106,441.7	100,623.3	198,152	187,320	94.53%

Location	Time On (hrs)	Pressure (kpa)	ACTL Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive 4-15-40-24W4 ACTL Delivery Meter - 090-FIT-0202	743.27	11309.0	65,551.9	64,670.6	122,031	120,391	98.66%
<b>Average</b>			<b>2,114.6</b>	<b>2,086.1</b>	<b>3,936</b>	<b>3,884</b>	<b>98.66%</b>
Total			65,551.9	64,670.6	122,031	120,391	98.66%

Location	Time On (hrs)	Pressure (kpa)	Clive 04-15 Sales				CO2 Content
			Gross Volume (e3m3)	Net CO2 (e3m3)	Gross (Tonnes)	Net CO2 (Tonnes)	%
Clive Battery 4-15-40-24W4 Recycle Gas - 091-FIT-0034A	715.00	0.0	40,798.2	35,838.1	75,950	66,716	87.84%
<b>Average</b>			<b>1,316.1</b>	<b>1,156.1</b>	<b>2,450</b>	<b>2,152</b>	<b>87.84%</b>
Total			40,798.2	35,838.1	75,950	66,716	87.84%

<b>Total Injection (e3m3)</b>	<b>106,441.7</b>
<b>Total Delivery (e3m3)</b>	<b>106,350.1</b>
<b>Proration</b>	<b>100.1%</b>



Clive CO2 Injection Well





07000560A      EE140705621W4MFIT0210G      000189030      22ER974233A      22ER974582A  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      METER 091-FIT- 0210      14-07-056-21W4  
*Operator Name      Sampling Point      Unique Well Identifier*

SCS14-7 CO2 METER -091-FIT-0210      Well License      Well Status      Well Fluid Status      LSD  
*Well Name*

REDWATER      NOT APPLICABLE      AGAT RED DEER      BB  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From :      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Dec 30, 2022 8:40      Jan 04, 2023      Jan 13, 2023      Jan 13, 2023      Calgary - Bernie Diep - Supervisor  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information : FIELD H2S BY TUBE = 0PPM; CC:22CLV001; CO2 CONTENT = 91.82%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00732	0.84658		0.00673
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00052	0.06062		0.00051
CO <sub>2</sub>	0.99135	0.00000		0.99210
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00073	0.08392		0.00050
C <sub>2</sub>	0.00002	0.00233	0.1	0.00003
C <sub>3</sub>	0.00001	0.00073	TRACE	0.00001
iC <sub>4</sub>	0.00001	0.00148	0.1	0.00002
nC <sub>4</sub>	0.00001	0.00149	0.1	0.00001
iC <sub>5</sub>	0.00001	0.00107	TRACE	0.00001
nC <sub>5</sub>	0.00002	0.00177	0.1	0.00001
C <sub>6</sub>	0.00000	0.00000	0.0	0.00001
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00006
TOTAL	1.00000	1.00000	0.3	1.00000

WDMS Data Verification Check



### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m<sup>3</sup>)

Gross		Net	
<b>0.13</b>	<b>14.39</b>	<b>0.11</b>	<b>12.44</b>
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density

Relative		Absolute	
<b>1.508</b>	<b>0.181</b>	<b>0.0</b>	<b>1.847</b>
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties

As Sampled		Acid Gas Free	
<b>7328.27</b>	<b>301.98</b>	<b>1740.18</b>	<b>55.29</b>
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H<sub>2</sub>S) (ppm)

Field Value	Laboratory Value	g/m <sup>3</sup>
<b>0</b>		<b>0.00</b>
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)

<b>43.67</b>	<b>0.00</b>
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure

<b>129.13</b>	<b>0.9943</b>
<i>C<sub>5+</sub>(kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

Gas Compressibility





07000560A	EE140705621W4MFIT	000189030	22ER974233A	22ER974582A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER 091-FIT- 0210	14-07-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

SCS14-7 CO2 METER -091-FIT-0210	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00000	0.00000	0.0000
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual



11001463A EE140705621W4MFIT0210G 000189030 22ER915639A 22ER974233A  
 Container Identification Sample Point Code Meter Code AGAT WDMS Number Previous Number Laboratory Number

ENHANCE ENERGY INC METER 091-FIT- 0210 14-07-056-21W4  
 Operator Name Sampling Point Unique Well Identifier

SCS14-7 CO2 METER -091-FIT-0210  
 Well Name Well License Well Status Well Fluid Status LSD

REDWATER NOT APPLICABLE AGAT RED DEER BA/BB  
 Field or Area Pool or Zone Sampler's Company Name of Sampler

Test Interval (mKB) Elevation (m) Pressure (kPa) Temperature (°C)  
 From: To: Test Type Test No. KB GRD Source Received Source Received

Nov 28, 2022 10:45 Nov 29, 2022 Dec 05, 2022 Dec 05, 2022 Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled Date Received Date Analyzed Date Reported Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00673	0.85307		0.00744
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00051	0.06428		0.00045
CO <sub>2</sub>	0.99210	0.00000		0.99137
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00050	0.06359		0.00074
C <sub>2</sub>	0.00003	0.00399	0.1	0.00000
C <sub>3</sub>	0.00001	0.00143	TRACE	0.00000
iC <sub>4</sub>	0.00002	0.00267	0.1	0.00000
nC <sub>4</sub>	0.00001	0.00106	TRACE	0.00000
iC <sub>5</sub>	0.00001	0.00094	TRACE	0.00000
nC <sub>5</sub>	0.00001	0.00095	TRACE	0.00000
C <sub>6</sub>	0.00001	0.00112	TRACE	0.00000
C <sub>7+</sub>	0.00006	0.00690	0.3	0.00000
TOTAL	1.00000	1.00000	0.7	1.00000

WDMS Data Verification Check



### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>0.12</b>	<b>15.31</b>	<b>0.11</b>	<b>13.43</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
<b>1.509</b>	<b>0.201</b>	<b>762.8</b>	<b>1.849</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7332.19</b>	<b>302.18</b>	<b>1697.62</b>	<b>57.15</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>0</b>			<b>0.00</b>
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>43.71</b>	<b>95.15</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
<b>40.76</b>	<b>0.9943</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa



11001463A	EE140705621W4MFIT	000189030	22ER915639A	22ER974233A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>AGAT WDMS Number</i>	<i>Previous Number</i>

ENHANCE ENERGY INC	METER 091-FIT- 0210	14-07-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

SCS14-7 CO2 METER -091-FIT-0210	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00007	0.00802	0.3344
68.9+	C <sub>7</sub> +	Heptanes+	0.00006	0.00690	0.2861
98.6+	C <sub>8</sub> +	Octanes+	0.00003	0.00366	0.1480
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00016	0.0065
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00003	0.00324	0.1381
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00003	0.00350	0.1415
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00016	0.0065
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00008	0.0030
68.73	C <sub>6</sub>	n-Hexane	0.00001	0.00105	0.0453
71.83	C <sub>6</sub>	Methylcyclopentane	0.00001	0.00092	0.0391
80.06	C <sub>6</sub>	Benzene	0.00000	0.00032	0.0093
80.78	C <sub>6</sub>	Cyclohexane	0.00001	0.00109	0.0452
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00002	0.00256	0.1084
110.61	C <sub>7</sub>	Toluene	0.00001	0.00094	0.0330
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00011	0.0046
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual



04000687A      EE140705621W4MFIT0210G      000189030      22ER911802B      22ER915639A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 091-FIT- 0210      14-07-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

SCS14-7 CO2 METER -091-FIT-0210  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From :      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Jul 22, 2022 9:00      Jul 25, 2022      Jul 29, 2022      Jul 29, 2022      Grande Prairie - Yonghui Sun - Laboratory  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :  
 CC: 22CLV001

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00744	0.86209		0.00509
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00045	0.05230		0.00043
CO <sub>2</sub>	0.99137	0.00000		0.99361
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00074	0.08561		0.00070
C <sub>2</sub>	0.00000	0.00000	0.0	0.00004
C <sub>3</sub>	0.00000	0.00000	0.0	0.00001
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00001
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00001
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00001
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00001
C <sub>6</sub>	0.00000	0.00000	0.0	0.00002
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00006
TOTAL	1.00000	1.00000	0.0	1.00000

WDMS Data Verification Check



### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m<sup>3</sup>)

Gross		Net	
<b>0.12</b>	<b>13.63</b>	<b>0.10</b>	<b>11.73</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density

Relative		Absolute	
<b>1.508</b>	<b>0.158</b>	<b>0.0</b>	<b>1.847</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties

As Sampled		Acid Gas Free	
<b>7328.02</b>	<b>301.95</b>	<b>1704.99</b>	<b>51.54</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H<sub>2</sub>S) (ppm)

Field Value	Laboratory Value	g/m <sup>3</sup>
<b>0</b>		<b>0.00</b>
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other
		GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)

<b>43.67</b>	<b>0.00</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure

<b>0.00</b>
C <sub>5+</sub> (kPa)

Gas Compressibility

<b>0.9944</b>
@ 15 °C & 101.325 kPa

**Disclaimer: The result in this report has been confirmed by a duplicate run.**

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



04000687A	EE140705621W4MFIT	000189030	22ER911802B	22ER915639A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER 091-FIT- 0210	14-07-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

SCS14-7 CO2 METER -091-FIT-0210	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00000	0.00000	0.0000
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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13000554B      EE140705621W4MFIT0210G      000189030      22ER893697A      22ER911802B  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 091-FIT- 0210      14-07-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

SCS14-7 CO2 METER -091-FIT-0210  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)	Elevation (m)	Pressure (kPa)	Temperature (°C)
From :      To:	KB      GRD	1240      1200 Source      Received	19      21 Source      Received

Jun 23, 2022 13:25      Jun 27, 2022      Jun 29, 2022      Jun 29, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00509	0.79454		0.00606
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00043	0.06725		0.00044
CO <sub>2</sub>	0.99361	0.00000		0.99299
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00070	0.10875		0.00048
C <sub>2</sub>	0.00004	0.00581	0.1	0.00000
C <sub>3</sub>	0.00001	0.00226	0.1	0.00000
iC <sub>4</sub>	0.00001	0.00230	0.1	0.00003
nC <sub>4</sub>	0.00001	0.00178	TRACE	0.00000
iC <sub>5</sub>	0.00001	0.00134	TRACE	0.00000
nC <sub>5</sub>	0.00001	0.00198	0.1	0.00000
C <sub>6</sub>	0.00002	0.00362	0.1	0.00000
C <sub>7+</sub>	0.00006	0.01039	0.4	0.00000
TOTAL	1.00000	1.00000	0.9	1.00000

WDMS Data Verification Check

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>0.12</b>	<b>17.95</b>	<b>0.10</b>	<b>15.85</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
<b>1.512</b>	<b>0.252</b>	<b>732.0</b>	<b>1.852</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7341.73</b>	<b>302.62</b>	<b>1876.81</b>	<b>68.99</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>0</b>		<b>0.00</b>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>43.77</b>	<b>98.25</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
<b>43.41</b>	<b>0.9943</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa



13000554B	EE140705621W4MFIT	000189030	22ER893697A	22ER911802B
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER 091-FIT- 0210	14-07-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

SCS14-7 CO2 METER -091-FIT-0210	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00008	0.01401	0.5014
68.9+	C <sub>7</sub> +	Heptanes+	0.00006	0.01039	0.3768
98.6+	C <sub>8</sub> +	Octanes+	0.00002	0.00423	0.1560
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00004	0.00616	0.2207
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00002	0.00423	0.1560
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00065	0.0204
68.73	C <sub>6</sub>	n-Hexane	0.00001	0.00214	0.0755
71.83	C <sub>6</sub>	Methylcyclopentane	0.00001	0.00147	0.0508
80.06	C <sub>6</sub>	Benzene	0.00000	0.00040	0.0097
80.78	C <sub>6</sub>	Cyclohexane	0.00001	0.00144	0.0484
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00053	0.0238
100.94	C <sub>7</sub>	Methylcyclohexane	0.00001	0.00172	0.0592
110.61	C <sub>7</sub>	Toluene	0.00001	0.00089	0.0255
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



04000486A      EE140705621W4MFIT0210G      000189030      22ER886123B      22ER893697A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 091-FIT- 0210      14-07-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

SCS14-7 CO2 METER -091-FIT-0210  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	1235	1200	18	23
				Source	Received	Source	Received

May 24, 2022 9:30      May 25, 2022      May 30, 2022      May 30, 2022      Calgary - Svetlana Nikolic - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00606	0.86426		0.00698
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00044	0.06286		0.00131
CO <sub>2</sub>	0.99299	0.00000		0.99097
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00048	0.06865		0.00072
C <sub>2</sub>	0.00000	0.00000	0.0	0.00000
C <sub>3</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>4</sub>	0.00003	0.00423	0.1	0.00000
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00001
C <sub>6</sub>	0.00000	0.00000	0.0	0.00001
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00000
TOTAL	1.00000	1.00000	0.1	1.00000

WDMS Data Verification Check



### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m<sup>3</sup>)

Gross		Net	
<b>0.10</b>	<b>13.53</b>	<b>0.08</b>	<b>11.65</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density

Relative		Absolute	
<b>1.510</b>	<b>0.167</b>	<b>0.0</b>	<b>1.850</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties

As Sampled		Acid Gas Free	
<b>7337.05</b>	<b>302.36</b>	<b>1681.05</b>	<b>51.43</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H<sub>2</sub>S) (ppm)

Field Value		Laboratory Value		g/m <sup>3</sup>
			<b>0</b>	<b>0.00</b>
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)	

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)

<b>43.74</b>	<b>0.00</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure

<b>0.00</b>	<b>0.9943</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

Gas Compressibility

**Disclaimer: The result in this report has been confirmed by a duplicate run.**

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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04000486A	EE140705621W4MFIT	000189030	22ER886123B	22ER893697A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER 091-FIT- 0210	14-07-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

SCS14-7 CO2 METER -091-FIT-0210	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00000	0.00000	0.0000
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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00012326B      EE140705621W4MFIT0210G      000189030      22ER869991E      22ER886123B  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 091-FIT- 0210      14-07-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

SCS14-7 CO2 METER -091-FIT-0210  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BB  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	1230	1300	12	23
Test Type		Test No.		Source		Received	

Apr 21, 2022 8:10      Apr 22, 2022      Apr 27, 2022      Apr 27, 2022      Calgary - Bernie Diep - Supervisor  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : FIELD H2S BY TUBE = 0ppm; CO2 CONTENT = 99.10% (FREE AIR)

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00698	0.77293		0.00751
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00131	0.14539		0.00013
CO <sub>2</sub>	0.99097	0.00000		0.99027
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00072	0.07969		0.00085
C <sub>2</sub>	0.00000	0.00000	0.0	0.00003
C <sub>3</sub>	0.00000	0.00000	0.0	0.00002
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00002
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00002
iC <sub>5</sub>	0.00000	0.00055	TRACE	0.00002
nC <sub>5</sub>	0.00001	0.00079	TRACE	0.00002
C <sub>6</sub>	0.00001	0.00066	TRACE	0.00020
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00091
TOTAL	1.00000	1.00000	0.1	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.12	12.65	0.10	10.90
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.508	0.244	0.0	1.847
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7327.36	301.93	1883.12	60.15
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		g/m <sup>3</sup>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)
		0.00	

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.68	0.00
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure		Gas Compressibility	
99.59	0.9944	@ 15 °C & 101.325 kPa	
C <sub>5+</sub> (kPa)			

WDMS Data Verification Check



Exceeded compare limits: N2, C7



00012326B	EE140705621W4MFIT	000189030	22ER869991E	22ER886123B
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER 091-FIT- 0210	14-07-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

SCS14-7 CO2 METER -091-FIT-0210	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00001	0.00066	0.0325
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00001	0.00066	0.0325
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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13000601E	EE140705621W4MFIT0210G	000189030	22ER867166A	22ER869991E
<small>Container Identification</small>	<small>Sample Point Code</small>	<small>Meter Code</small>	<small>AGAT WDMS Number</small>	<small>Previous Number</small>

ENHANCE ENERGY INC	METER 091-FIT- 0210	14-07-056-21W4
<small>Operator Name</small>	<small>Sampling Point</small>	<small>Unique Well Identifier</small>

SCS14-7 CO2 METER -091-FIT-0210	<small>Well License</small>	<small>Well Status</small>	<small>Well Fluid Status</small>	<small>LSD</small>
<small>Well Name</small>				

REDWATER	NOT APPLICABLE	AGAT RED DEER	BA
<small>Field or Area</small>	<small>Pool or Zone</small>	<small>Sampler's Company</small>	<small>Name of Sampler</small>

<small>Test Interval (mKB)</small>	<small>Elevation (m)</small>	<small>Pressure (kPa)</small>	<small>Temperature (°C)</small>
From : To:	KB GRD	1230 1250 <small>Source Received</small>	8 22 <small>Source Received</small>

Mar 11, 2022 9:45	Mar 14, 2022	Mar 17, 2022	Mar 17, 2022	Calgary - Bernie Diep - Supervisor
<small>Date/Time Sampled</small>	<small>Date Received</small>	<small>Date Analyzed</small>	<small>Date Reported</small>	<small>Location - Approved By - Title</small>

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00751	0.76978		0.00766
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00013	0.01380		0.00018
CO <sub>2</sub>	0.99027	0.00000		0.99132
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00085	0.08696		0.00080
C <sub>2</sub>	0.00003	0.00350	0.1	0.00004
C <sub>3</sub>	0.00002	0.00184	0.1	0.00000
iC <sub>4</sub>	0.00002	0.00232	0.1	0.00000
nC <sub>4</sub>	0.00002	0.00256	0.1	0.00000
iC <sub>5</sub>	0.00002	0.00178	0.1	0.00000
nC <sub>5</sub>	0.00002	0.00207	0.1	0.00000
C <sub>6</sub>	0.00020	0.02087	1.1	0.00000
C <sub>7+</sub>	0.00091	0.09452	5.3	0.00000
TOTAL	1.00000	1.00000	7.0	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>0.36</b>	<b>37.21</b>	<b>0.33</b>	<b>33.70</b>
<small>Air Free as Received</small>	<small>Moisture &amp; Acid Gas Free</small>	<small>Air Free as Received</small>	<small>Moisture &amp; Acid Gas Free</small>

Calculated Density			
Relative		Absolute	
<b>1.510</b>	<b>0.539</b>	<b>754.7</b>	<b>1.850</b>
<small>Moisture Free As Received</small>	<small>Moisture &amp; Acid Gas Free</small>	<small>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</small>	<small>Total Sample Density (kg/m<sup>3</sup>)</small>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7322.98</b>	<b>302.27</b>	<b>1840.12</b>	<b>113.92</b>
<small>pPc (kPa)</small>	<small>pTc (K)</small>	<small>pPc (kPa)</small>	<small>pTc (K)</small>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
			<b>0.00</b>
<small>Stain Tube (GPA 2377)</small>	<small>Tutweiler (GPA C1)</small>	<small>Other</small>	<small>GC-SCD (ASTM D5504)</small>

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>43.73</b>	<b>103.13</b>
<small>Total Sample</small>	<small>C<sub>7+</sub> Fraction</small>

Calculated Vapour Pressure	Gas Compressibility
<b>20.14</b>	<b>0.9942</b>
<small>C<sub>5+</sub>(kPa)</small>	<small>@ 15 °C &amp; 101.325 kPa</small>

WDMS Data Verification Check



**Exceeded compare limits: C7**



1300601E	EE140705621W4MFIT	000189030	22ER867166A	22ER869991E
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER 091-FIT- 0210	14-07-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

SCS14-7 CO2 METER -091-FIT-0210	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
36.2+	C <sub>6</sub> +	Hexanes+	0.00111	0.11538	6.4286
68.9+	C <sub>7</sub> +	Heptanes+	0.00091	0.09452	5.3183
98.6+	C <sub>8</sub> +	Octanes+	0.00055	0.05708	3.2962
125.8+	C <sub>9</sub> +	Nonanes+	0.00019	0.02075	1.3158
150.9+	C <sub>10</sub> +	Decanes+	0.00005	0.00571	0.4013
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00053	0.0432
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00036	0.03743	2.0221
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00036	0.03634	1.9804
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00014	0.01504	0.9145
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00005	0.00504	0.3502
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00053	0.0432
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
49.28	C <sub>5</sub>	Cyclopentane	0.00001	0.00103	0.0488
68.73	C <sub>6</sub>	n-Hexane	0.00012	0.01259	0.6745
71.83	C <sub>6</sub>	Methylcyclopentane	0.00005	0.00528	0.2776
80.06	C <sub>6</sub>	Benzene	0.00004	0.00433	0.1577
80.78	C <sub>6</sub>	Cyclohexane	0.00009	0.00898	0.4595
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00001	0.00130	0.0879
100.94	C <sub>7</sub>	Methylcyclohexane	0.00013	0.01324	0.6933
110.61	C <sub>7</sub>	Toluene	0.00011	0.01098	0.4790
136.16	C <sub>8</sub>	Ethylbenzene	0.00001	0.00090	0.0452
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00004	0.00390	0.1972
144.42	C <sub>8</sub>	o-Xylene	0.00001	0.00131	0.0647
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00001	0.00067	0.0437

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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05003731A      EE140705621W4MFIT0210G      000189030      22ER856651A      22ER867166A  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      METER 091-FIT- 0210      14-07-056-21W4  
*Operator Name      Sampling Point      Unique Well Identifier*

SCS14-7 CO2 METER -091-FIT-0210      Well License      Well Status      Well Fluid Status      LSD  
*Well Name*

REDWATER      NOT APPLICABLE      AGAT RED DEER      BA/BB  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	1230	1350	9	21
Test Type		Test No.		Source		Received	

Feb 25, 2022 8:50      Feb 28, 2022      Mar 04, 2022      Mar 04, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information : O2 = 138 ppm

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00766	0.88164		0.00649
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00018	0.02126		0.00077
CO <sub>2</sub>	0.99132	0.00000		0.98760
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00080	0.09160		0.00061
C <sub>2</sub>	0.00004	0.00494	0.2	0.00008
C <sub>3</sub>	0.00000	0.00056	TRACE	0.00002
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00006
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00028
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00072
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00096
C <sub>6</sub>	0.00000	0.00000	0.0	0.00093
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00148
TOTAL	1.00000	1.00000	0.2	1.00000

WDMS Data Verification Check



**Exceeded compare limits: IC5, NC5, C6, C7**

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.13	14.47	0.11	12.48
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density			
Relative		Absolute	
1.508	0.139	0.0	1.847
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7327.52	301.93	1679.27	51.12
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		0.00	
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.66	0.00
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
0.00	0.9944
<i>C<sub>5+</sub>(kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>



05003731A	EE140705621W4MFIT	000189030	22ER856651A	22ER867166A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>AGAT WDMS Number</i>	<i>Previous Number</i>

ENHANCE ENERGY INC	METER 091-FIT- 0210	14-07-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

SCS14-7 CO2 METER -091-FIT-0210	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00000	0.00000	0.0000
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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05003080A EE140705621W4MFIT0210G 000189030 21ER848629A 22ER856651A  
 Container Identification Sample Point Code Meter Code AGAT WDMS Number Previous Number Laboratory Number

ENHANCE ENERGY INC METER 091-FIT- 0210 14-07-056-21W4  
 Operator Name Sampling Point Unique Well Identifier

SCS14-7 CO2 METER -091-FIT-0210  
 Well Name Well License Well Status Well Fluid Status LSD

REDWATER NOT APPLICABLE AGAT RED DEER BA  
 Field or Area Pool or Zone Sampler's Company Name of Sampler

Test Interval (mKB) Elevation (m) Pressure (kPa) Temperature (°C)  
 From : To: Test Type Test No. KB GRD Source Received Source Received

Jan 26, 2022 9:10 Jan 28, 2022 Feb 03, 2022 Feb 03, 2022 Calgary - Svetlana Nikolic - Reporter  
 Date/Time Sampled Date Received Date Analyzed Date Reported Location - Approved By - Title

Other Information : LAB CO2 BY GC = 93.21%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00649	0.52384		0.00709
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00077	0.06231		0.00243
CO <sub>2</sub>	0.98760	0.00000		0.98955
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00061	0.04933		0.00068
C <sub>2</sub>	0.00008	0.00633	0.3	0.00000
C <sub>3</sub>	0.00002	0.00127	0.1	0.00001
iC <sub>4</sub>	0.00006	0.00487	0.3	0.00008
nC <sub>4</sub>	0.00028	0.02283	1.2	0.00004
iC <sub>5</sub>	0.00072	0.05848	3.5	0.00000
nC <sub>5</sub>	0.00096	0.07720	4.6	0.00000
C <sub>6</sub>	0.00093	0.07623	5.1	0.00001
C <sub>7+</sub>	0.00148	0.11730	8.2	0.00011
TOTAL	1.00000	1.00000	23.3	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.86	69.44	0.80	64.26
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.515	1.151	733.6	1.856
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7313.76	303.03	2274.48	215.44
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
		0	0.00
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.88	98.58
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure		Gas Compressibility	
68.97		0.9940	
C <sub>5+</sub> (kPa)		@ 15 °C & 101.325 kPa	

WDMS Data Verification Check



Exceeded compare limits: IC5, NC5, C6, C7

Disclaimer: The result in this report has been confirmed by a duplicate run.

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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05003080A	EE140705621W4MFIT	000189030	21ER848629A	22ER856651A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>AGAT WDMS Number</i>	<i>Previous Number</i>

ENHANCE ENERGY INC	METER 091-FIT- 0210	14-07-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

SCS14-7 CO2 METER -091-FIT-0210	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
36.2+	C <sub>6</sub> +	Hexanes+	0.00241	0.19354	13.3624
68.9+	C <sub>7</sub> +	Heptanes+	0.00148	0.11730	8.2396
98.6+	C <sub>8</sub> +	Octanes+	0.00059	0.04700	3.3434
125.8+	C <sub>9</sub> +	Nonanes+	0.00005	0.00352	0.2689
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00089	0.07030	4.8963
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00054	0.04348	3.0744
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00005	0.00352	0.2689
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
49.28	C <sub>5</sub>	Cyclopentane	0.00009	0.00766	0.4625
68.73	C <sub>6</sub>	n-Hexane	0.00042	0.03422	2.3279
71.83	C <sub>6</sub>	Methylcyclopentane	0.00016	0.01279	0.8536
80.06	C <sub>6</sub>	Benzene	0.00008	0.00625	0.2894
80.78	C <sub>6</sub>	Cyclohexane	0.00016	0.01277	0.8305
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00005	0.00376	0.3232
100.94	C <sub>7</sub>	Methylcyclohexane	0.00025	0.01991	1.3242
110.61	C <sub>7</sub>	Toluene	0.00010	0.00834	0.4621
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00002	0.00126	0.0812
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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13000553B      EE041705621W4MFIT4116G      000201859      22ER945731A      22ER974233B  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER FIT-4116      04-17-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

RCRF 4-17 CO2 METER-FIT-4116  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BA/BB  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	4200	11500	-10	21
				Source	Received	Source	Received

Nov 28, 2022 11:10      Nov 29, 2022      Dec 05, 2022      Dec 05, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00419	0.74690		0.00866
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00124	0.22063		0.00168
CO <sub>2</sub>	0.99439	0.00000		0.98953
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00016	0.02851		0.00013
C <sub>2</sub>	0.00000	0.00000	0.0	0.00000
C <sub>3</sub>	0.00001	0.00193	TRACE	0.00000
iC <sub>4</sub>	0.00001	0.00143	TRACE	0.00000
nC <sub>4</sub>	0.00000	0.00060	TRACE	0.00000
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
C <sub>6</sub>	0.00000	0.00000	0.0	0.00000
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00000
TOTAL	1.00000	1.00000	0.1	1.00000

WDMS Data Verification Check 

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.06	10.52	0.05	9.00
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.513	0.288	0.0	1.853
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7346.14	302.76	1878.23	59.62
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		0.00	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.81	0.00
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
0.00	0.9943
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa



13000553B	EE041705621W4MFIT	000201859	22ER945731A	22ER974233B
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER FIT-4116	04-17-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

RCRF 4-17 CO2 METER-FIT-4116	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00000	0.00000	0.0000
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual



05003372A      EE041705621W4MFIT4116G      000201859      22ER937524A      22ER945731A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER FIT-4116      04-17-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

RCRF 4-17 CO2 METER-FIT-4116  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)	Elevation (m)	Pressure (kPa)	Temperature (°C)
From : To:	KB GRD	4100 6500 Source Received	-10 21 Source Received

Sep 21, 2022 9:45      Sep 22, 2022      Sep 27, 2022      Sep 27, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00866	0.82705		0.00796
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00168	0.16046		0.00171
CO <sub>2</sub>	0.98953	0.00000		0.99019
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00013	0.01249		0.00014
C <sub>2</sub>	0.00000	0.00000	0.0	0.00000
C <sub>3</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
C <sub>6</sub>	0.00000	0.00000	0.0	0.00000
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00000
TOTAL	1.00000	1.00000	0.0	1.00000

WDMS Data Verification Check



### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.11	10.45	0.09	8.88
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.506	0.220	0.0	1.845
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7317.46	301.47	1689.93	50.09
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		0.00	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.62	0.00
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
0.00	0.9944
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa



05003372A	EE041705621W4MFIT	000201859	22ER937524A	22ER945731A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER FIT-4116	04-17-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

RCRF 4-17 CO2 METER-FIT-4116	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00000	0.00000	0.0000
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



13001172A EE041705621W4MFI4116G 000201859 22ER915639B 22ER937524A  
 Container Identification Sample Point Code Meter Code AGAT WDMS Number Previous Number Laboratory Number

ENHANCE ENERGY INC METER FIT-4116 04-17-056-21W4  
 Operator Name Sampling Point Unique Well Identifier

RCRF 4-17 CO2 METER-FIT-4116  
 Well Name Well License Well Status Well Fluid Status LSD

REDWATER NOT APPLICABLE AGAT RED DEER BA  
 Field or Area Pool or Zone Sampler's Company Name of Sampler

Test Interval (mKB) Elevation (m) Pressure (kPa) Temperature (°C)  
 From: To: Test Type Test No. KB GRD Source Received Source Received

Aug 30, 2022 9:55 Sep 01, 2022 Sep 07, 2022 Sep 07, 2022 Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled Date Received Date Analyzed Date Reported Location - Approved By - Title

Other Information : CC: 22CLV001

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00796	0.81126		0.00917
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00171	0.17481		0.00209
CO <sub>2</sub>	0.99019	0.00000		0.98626
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00014	0.01393		0.00013
C <sub>2</sub>	0.00000	0.00000	0.0	0.00000
C <sub>3</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
C <sub>6</sub>	0.00000	0.00000	0.0	0.00000
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00235
TOTAL	1.00000	1.00000	0.0	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.10	10.32	0.09	8.77
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.507	0.233	0.0	1.846
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7321.56	301.65	1724.52	51.65
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
			g/m <sup>3</sup>
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)
			0.00

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.64	0.00
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
0.00	0.9944
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeded compare limits: C7**



13001172A	EE041705621W4MFIT	000201859	22ER915639B	22ER937524A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER FIT-4116	04-17-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

RCRF 4-17 CO2 METER-FIT-4116	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00000	0.00000	0.0000
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual



04000832B      EE041705621W4MFI4116G      000201859      22ER911802A      22ER915639B  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER FIT-4116      04-17-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

RCRF 4-17 CO2 METER-FIT-4116  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	4050	7000	-10	23
				Source	Received	Source	Received

Jul 22, 2022 9:30      Jul 25, 2022      Jul 29, 2022      Jul 29, 2022      Grande Prairie - Yonghui Sun - Laboratory  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : CC: 22CLV001

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00917	0.66690		0.01686
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00209	0.15169		0.00292
CO <sub>2</sub>	0.98626	0.00000		0.97900
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00013	0.00977		0.00022
C <sub>2</sub>	0.00000	0.00000	0.0	0.00000
C <sub>3</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
C <sub>6</sub>	0.00000	0.00000	0.0	0.00000
C <sub>7+</sub>	0.00235	0.17164	13.5	0.00100
TOTAL	1.00000	1.00000	13.5	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.61	44.32	0.55	39.83
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.510	0.844	807.1	1.850
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7303.21	301.96	2010.59	146.41
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		0.00	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.74	108.87
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
4.47	0.9940
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



Exceeded compare limits: C7

Disclaimer: The result in this report has been confirmed by a duplicate run.

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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04000832B	EE041705621W4MFIT	000201859	22ER911802A	22ER915639B
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER FIT-4116	04-17-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

RCRF 4-17 CO2 METER-FIT-4116	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00235	0.17164	13.4624
68.9+	C <sub>7</sub> +	Heptanes+	0.00235	0.17164	13.4624
98.6+	C <sub>8</sub> +	Octanes+	0.00235	0.17164	13.4624
125.8+	C <sub>9</sub> +	Nonanes+	0.00120	0.08796	7.9565
150.9+	C <sub>10</sub> +	Decanes+	0.00032	0.02349	2.3731
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00115	0.08368	5.5059
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00088	0.06448	5.5834
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00032	0.02349	2.3731
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00100	0.07256	4.4612
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00029	0.02106	1.5000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual



05002786A      EE041705621W4MFIT4116G      000201859      22ER893697B      22ER911802A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER FIT-4116      04-17-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

RCRF 4-17 CO2 METER-FIT-4116  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	4050	6100	-10	21
				Source	Received	Source	Received

Jun 23, 2022 13:45      Jun 27, 2022      Jun 29, 2022      Jun 29, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.01686	0.80248		0.01484
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00292	0.13890		0.00280
CO <sub>2</sub>	0.97900	0.00000		0.98220
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00022	0.01057		0.00016
C <sub>2</sub>	0.00000	0.00000	0.0	0.00000
C <sub>3</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
C <sub>6</sub>	0.00000	0.00000	0.0	0.00000
C <sub>7+</sub>	0.00100	0.04805	5.8	0.00000
TOTAL	1.00000	1.00000	5.8	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>0.43</b>	<b>20.14</b>	<b>0.37</b>	<b>17.72</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
<b>1.496</b>	<b>0.377</b>	<b>803.9</b>	<b>1.832</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7258.41</b>	<b>299.32</b>	<b>1732.91</b>	<b>75.06</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>0</b>			<b>0.00</b>
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>43.31</b>	<b>109.26</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
<b>4.08</b>	<b>0.9943</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeded compare limits: C7**



05002786A	EE041705621W4MFIT	000201859	22ER893697B	22ER911802A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER FIT-4116	04-17-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

RCRF 4-17 CO2 METER-FIT-4116	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00100	0.04805	5.8037
68.9+	C <sub>7</sub> +	Heptanes+	0.00100	0.04805	5.8037
98.6+	C <sub>8</sub> +	Octanes+	0.00100	0.04805	5.8037
125.8+	C <sub>9</sub> +	Nonanes+	0.00054	0.02583	3.3032
150.9+	C <sub>10</sub> +	Decanes+	0.00008	0.00386	0.5886
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00046	0.02222	2.5004
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00046	0.02198	2.7147
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00008	0.00386	0.5886
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00029	0.01391	1.3070
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00025	0.01197	1.3031
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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13000961B      EE041705621W4MFIT4116G      000201859      22ER886123A      22ER893697B  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER FIT-4116      04-17-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

RCRF 4-17 CO2 METER-FIT-4116  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)	Elevation (m)	Pressure (kPa)	Temperature (°C)
From :      To:	KB      GRD	4200      5300 Source      Received	-10      23 Source      Received

May 24, 2022 10:25      May 25, 2022      May 30, 2022      May 30, 2022      Calgary - Svetlana Nikolic - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.01484	0.83365		0.00825
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00280	0.15725		0.00177
CO <sub>2</sub>	0.98220	0.00000		0.98984
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00016	0.00910		0.00014
C <sub>2</sub>	0.00000	0.00000	0.0	0.00000
C <sub>3</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
C <sub>6</sub>	0.00000	0.00000	0.0	0.00000
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00000
TOTAL	1.00000	1.00000	0.0	1.00000

WDMS Data Verification Check



### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.19	10.40	0.16	8.84
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.497	0.215	0.0	1.833
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7275.43	299.59	1672.11	49.25
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
		0	0.00
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.34	0.00
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
0.00	0.9944
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

**Disclaimer: The result in this report has been confirmed by a duplicate run.**

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



13000961B	EE041705621W4MFIT	000201859	22ER886123A	22ER893697B
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER FIT-4116	04-17-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

RCRF 4-17 CO2 METER-FIT-4116	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
36.2+	C <sub>6</sub> +	Hexanes+	0.00000	0.00000	0.0000
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



04000880A      EE041705621W4MFIT4116G      000201859      22ER869991F      22ER886123A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER FIT-4116      04-17-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

RCRF 4-17 CO2 METER-FIT-4116  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BB  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)	Elevation (m)	Pressure (kPa)	Temperature (°C)
From:      To:	KB      GRD	4200      10000 Source      Received	4      23 Source      Received

Apr 21, 2022 8:45      Apr 22, 2022      Apr 27, 2022      Apr 27, 2022      Calgary - Bernie Diep - Supervisor  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :      FIELD H2S BY UBE = 0ppm; CO2 CONTENT = 98.98% (AIR FREE)

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00825	0.81206		0.00868
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00177	0.17414		0.00187
CO <sub>2</sub>	0.98984	0.00000		0.98706
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00014	0.01380		0.00014
C <sub>2</sub>	0.00000	0.00000	0.0	0.00000
C <sub>3</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
C <sub>6</sub>	0.00000	0.00000	0.0	0.00000
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00225
TOTAL	1.00000	1.00000	0.0	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.11	10.32	0.09	8.78
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.507	0.233	0.0	1.846
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7319.57	301.56	1722.70	51.56
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		g/m <sup>3</sup>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.63	0.00
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure		Gas Compressibility	
0.00	0.9944	@ 15 °C & 101.325 kPa	
C <sub>5+</sub> (kPa)			

WDMS Data Verification Check



**Exceeded compare limits: C7**



04000880A	EE041705621W4MFIT	000201859	22ER869991F	22ER886123A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER FIT-4116	04-17-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

RCRF 4-17 CO2 METER-FIT-4116	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00000	0.00000	0.0000
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



05005037F      EE041705621W4MFI4116G      000201859      21ER835717B      22ER869991F  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER FIT-4116      04-17-056-21W4  
 Operator Name      Sampling Point      Unique Well Identifier

RCRF 4-17 CO2 METER-FIT-4116  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

REDWATER      NOT APPLICABLE      AGAT RED DEER      BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)	Elevation (m)	Pressure (kPa)	Temperature (°C)
From :      To:	KB      GRD	4100      8200 Source      Received	-10      22 Source      Received

Mar 11, 2022 10:30      Mar 14, 2022      Mar 17, 2022      Mar 17, 2022      Calgary - Bernie Diep - Supervisor  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00868	0.67051		0.00753
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00187	0.14476		0.00194
CO <sub>2</sub>	0.98706	0.00000		0.99030
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00014	0.01065		0.00011
C <sub>2</sub>	0.00000	0.00000	0.0	0.00000
C <sub>3</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
C <sub>6</sub>	0.00000	0.00000	0.0	0.00002
C <sub>7+</sub>	0.00225	0.17408	13.4	0.00010
TOTAL	1.00000	1.00000	13.4	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>0.60</b>	<b>46.33</b>	<b>0.52</b>	<b>40.36</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
<b>1.511</b>	<b>0.864</b>	<b>794.2</b>	<b>1.851</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7306.25</b>	<b>302.10</b>	<b>1913.74</b>	<b>147.20</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
			<b>0.00</b>
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>43.76</b>	<b>111.66</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
<b>4.71</b>	<b>0.9940</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeded compare limits: C7**





05005037F	EE041705621W4MFIT	000201859	21ER835717B	22ER869991F
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>AGAT WDMS Number</i>	<i>Previous Number</i>

ENHANCE ENERGY INC	METER FIT-4116	04-17-056-21W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

RCRF 4-17 CO2 METER-FIT-4116	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00225	0.17408	13.3958
68.9+	C <sub>7</sub> +	Heptanes+	0.00225	0.17408	13.3958
98.6+	C <sub>8</sub> +	Octanes+	0.00210	0.16227	12.4538
125.8+	C <sub>9</sub> +	Nonanes+	0.00130	0.10127	8.2443
150.9+	C <sub>10</sub> +	Decanes+	0.00045	0.03513	3.2542
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00015	0.01181	0.9420
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00080	0.06100	4.2095
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00085	0.06614	4.9901
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00045	0.03513	3.2542
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00024	0.01841	1.2794
110.61	C <sub>7</sub>	Toluene	0.00036	0.02744	1.5892
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00032	0.02487	1.6681
144.42	C <sub>8</sub>	o-Xylene	0.00014	0.01062	0.6983
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00013	0.01041	0.9021

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



13001557A      EE041504024W4MFIT100G      22GR965979A      22GR974584A  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
*Well Name      Well License      Well Status      Well Fluid Status      LSD*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	20	38	5	21
Test Type		Test No.		Source		Received	

Dec 01, 2022 10:25      Dec 02, 2022      Dec 08, 2022      Dec 08, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0064	0.8000		0.0069
He	0.0000	0.0000		0.0000
N <sub>2</sub>	0.0002	0.0250		0.0017
CO <sub>2</sub>	0.9920	0.0000		0.9894
H <sub>2</sub> S	0.0000	0.0000		0.0000
C <sub>1</sub>	0.0010	0.1250		0.0002
C <sub>2</sub>	0.0002	0.0250	0.7	0.0001
C <sub>3</sub>	0.0001	0.0125	0.4	0.0001
iC <sub>4</sub>	TRACE	TRACE	0.0	0.0004
nC <sub>4</sub>	0.0001	0.0125	0.4	0.0008
iC <sub>5</sub>	TRACE	TRACE	0.0	0.0001
nC <sub>5</sub>	TRACE	TRACE	0.0	0.0001
C <sub>6</sub>	TRACE	TRACE	0.0	0.0001
C <sub>7+</sub>	TRACE	TRACE	0.0	0.0001
TOTAL	1.0000	1.0000	1.5	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
<b>0.15</b>	<b>18.59</b>	<b>0.00</b>	<b>0.13</b>	<b>16.42</b>
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
<b>1.509</b>	<b>0.219</b>	<b>3.702</b>	<b>697.8</b>	<b>1.848</b>
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7333.3</b>	<b>302.2</b>	<b>1919.8</b>	<b>71.1</b>
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>0</b>			<b>0.00</b>
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
<b>43.7</b>	<b>107.2</b>
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
<b>0.00</b>	<b>0.9993</b>
<i>C<sub>s+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check



**Exceeds normal limits: CO2, H2**  
**Exceeded compare limits: N2, C1, NC4**



11002395A      EE041504024W4MFIT100G      22GR949120A      22GR965979A  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
*Well Name      Well License      Well Status      Well Fluid Status      LSD*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BA/BB  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	Source	Received	Source	Received
				62	78	2	21

Nov 04, 2022 11:25      Nov 07, 2022      Nov 11, 2022      Nov 11, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0069	0.6511		0.0071
He	0.0000	0.0000		0.0000
N <sub>2</sub>	0.0017	0.1604		0.0058
CO <sub>2</sub>	0.9894	0.0000		0.9849
H <sub>2</sub> S	0.0000	0.0000		0.0000
C <sub>1</sub>	0.0002	0.0189		0.0004
C <sub>2</sub>	0.0001	0.0094	0.4	0.0001
C <sub>3</sub>	0.0001	0.0094	0.4	0.0001
iC <sub>4</sub>	0.0004	0.0377	1.7	0.0001
nC <sub>4</sub>	0.0008	0.0755	3.4	0.0002
iC <sub>5</sub>	0.0001	0.0094	0.5	0.0002
nC <sub>5</sub>	0.0001	0.0094	0.5	0.0002
C <sub>6</sub>	0.0001	0.0094	0.5	0.0003
C <sub>7+</sub>	0.0001	0.0094	0.7	0.0006
TOTAL	1.0000	1.0000	8.1	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m<sup>3</sup>)

Gross			Net	
<b>0.33</b>	30.40	0.02	<b>0.29</b>	27.57
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density

Relative			Absolute	
<b>1.509</b>	0.574	3.944	706.7	1.849
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties

As Sampled		Acid Gas Free	
7321.1	302.1	2100.4	118.1
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H<sub>2</sub>S) (ppm)

Field Value	Laboratory Value	g/m <sup>3</sup>
<b>0</b>		0.00
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>
		<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)

43.7	114.2
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure

71.56	0.9922
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

Gas Compressibility

WDMS Data Verification Check



**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: NC<sub>4</sub>**



11000673A      EE041504024W4MFIT100G      000188887      22GR937849A      22GR949120A  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
*Well Name      Well License      Well Status      Well Fluid Status      LSD*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	80	100	10	21
Test Type		Test No.		Source		Received	

Oct 03, 2022 9:20      Oct 04, 2022      Oct 06, 2022      Oct 06, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information : **PLANT**

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0071	0.4704		0.0061
He	0.0000	0.0000		0.0000
N <sub>2</sub>	0.0058	0.3841		0.0022
CO <sub>2</sub>	0.9849	0.0000		0.9907
H <sub>2</sub> S	0.0000	0.0000		0.0000
C <sub>1</sub>	0.0004	0.0265		0.0009
C <sub>2</sub>	0.0001	0.0066	0.4	TRACE
C <sub>3</sub>	0.0001	0.0066	0.4	TRACE
iC <sub>4</sub>	0.0001	0.0066	0.4	TRACE
nC <sub>4</sub>	0.0002	0.0132	0.8	TRACE
iC <sub>5</sub>	0.0002	0.0132	1.0	TRACE
nC <sub>5</sub>	0.0002	0.0132	1.0	TRACE
C <sub>6</sub>	0.0003	0.0199	1.6	TRACE
C <sub>7+</sub>	0.0006	0.0397	4.0	0.0001
TOTAL	1.0000	1.0000	9.6	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
<b>0.40</b>	26.45	0.13	<b>0.36</b>	24.07
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
<b>1.508</b>	0.751	3.782	700.8	1.847
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7302.2	301.4	2422.0	126.5
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>0</b>		g/m <sup>3</sup>	
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>
		0.00	

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
43.7	109.6
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
49.34	0.9836
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check



**Exceeds normal limits: CO2, H2**

13000842A      EE041504024W4MFIT100G      000188887      22GR926850A      22GR937849A  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
*Well Name      Well License      Well Status      Well Fluid Status      LSD*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	Source	Received	Source	Received
				170	160	11	21

Sep 01, 2022 11:05      Sep 06, 2022      Sep 12, 2022      Sep 12, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0061	0.6558		0.0059
He	0.0000	0.0000		0.0000
N <sub>2</sub>	0.0022	0.2366		0.0047
CO <sub>2</sub>	0.9907	0.0000		0.9873
H <sub>2</sub> S	0.0000	0.0000		0.0000
C <sub>1</sub>	0.0009	0.0968		0.0010
C <sub>2</sub>	TRACE	TRACE	0.0	0.0001
C <sub>3</sub>	TRACE	TRACE	0.0	0.0002
iC <sub>4</sub>	TRACE	TRACE	0.0	TRACE
nC <sub>4</sub>	TRACE	TRACE	0.0	0.0001
iC <sub>5</sub>	TRACE	TRACE	0.0	0.0001
nC <sub>5</sub>	TRACE	TRACE	0.0	0.0001
C <sub>6</sub>	TRACE	TRACE	0.0	0.0001
C <sub>7+</sub>	0.0001	0.0108	0.7	0.0004
TOTAL	1.0000	1.0000	0.7	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
<b>0.13</b>	<b>14.01</b>	<b>0.02</b>	<b>0.11</b>	<b>12.33</b>
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
<b>1.509</b>	<b>0.371</b>	<b>3.944</b>	<b>706.7</b>	<b>1.848</b>
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7328.2</b>	<b>302.0</b>	<b>2126.1</b>	<b>76.2</b>
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>0</b>			<b>0.00</b>
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
<b>43.7</b>	<b>114.2</b>
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
<b>3.73</b>	<b>0.9978</b>
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check



**Exceeds normal limits: CO2, H2**

05002549A      EE041504024W4MFIT100G      000188887      22GR926850A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)	Elevation (m)	Pressure (kPa)	Temperature (°C)
From :      To:	KB      GRD	140      120 Source      Received	7      23 Source      Received

Aug 03, 2022 10:50      Aug 05, 2022      Aug 10, 2022      Aug 10, 2022      Calgary - Bernie Diep - Supervisor  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0059	0.4645		
He	0.0000	0.0000		
N <sub>2</sub>	0.0047	0.3701		
CO <sub>2</sub>	0.9873	0.0000		
H <sub>2</sub> S	0.0000	0.0000		
C <sub>1</sub>	0.0010	0.0787		
C <sub>2</sub>	0.0001	0.0079	0.4	
C <sub>3</sub>	0.0002	0.0157	0.7	
iC <sub>4</sub>	TRACE	TRACE	0.0	
nC <sub>4</sub>	0.0001	0.0079	0.4	
iC <sub>5</sub>	0.0001	0.0079	0.5	
nC <sub>5</sub>	0.0001	0.0079	0.5	
C <sub>6</sub>	0.0001	0.0079	0.5	
C <sub>7+</sub>	0.0004	0.0315	2.8	
TOTAL	1.0000	1.0000	5.8	

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
0.29	22.57	0.09	0.26	20.45
Air Free as Received	Moisture & Acid Gas Free	C <sub>7+</sub> Moisture Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density				
Relative			Absolute	
1.509	0.669	3.944	706.6	1.848
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Moisture Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7315.2	301.7	2512.3	118.0
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)				
Field Value		Laboratory Value		g/m <sup>3</sup>
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)	

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
43.7	114.2
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
43.20	0.9853
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeds normal limits: CO2, H2**



08000150A      EE041504024W4MFIT100G      000188887      22ER901621A      22ER915638A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	Source	Received	Source	Received
				180	190	10	21

Jul 04, 2022 9:15      Jul 06, 2022      Jul 12, 2022      Jul 12, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : METER 090-FIT-100(ENH0202)

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00842	0.50005		0.00731
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00743	0.44125		0.00091
CO <sub>2</sub>	0.98318	0.00000		0.99034
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00081	0.04784		0.00099
C <sub>2</sub>	0.00000	0.00000	0.0	0.00011
C <sub>3</sub>	0.00001	0.00060	TRACE	0.00016
iC <sub>4</sub>	0.00002	0.00095	0.1	0.00005
nC <sub>4</sub>	0.00001	0.00080	0.1	0.00010
iC <sub>5</sub>	0.00001	0.00057	TRACE	0.00001
nC <sub>5</sub>	0.00001	0.00084	0.1	0.00001
C <sub>6</sub>	0.00001	0.00125	0.1	0.00000
C <sub>7+</sub>	0.00009	0.00584	0.6	0.00001
TOTAL	1.00000	1.00000	1.0	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.16	9.71	0.14	8.50
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.503	0.520	750.0	1.841
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7293.41	300.47	2410.34	86.94
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		g/m <sup>3</sup>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)
		0.00	

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.52	101.24
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
35.67	0.9944
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeded compare limits: N2**



08000150A	EE041504024W4MFIT	000188887	22ER901621A	22ER915638A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>AGAT WDMS Number</i>	<i>Previous Number</i>

ENHANCE ENERGY INC	METER 090-FIT-100(ENH 0202)	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00010	0.00709	0.6745
68.9+	C <sub>7</sub> +	Heptanes+	0.00009	0.00584	0.5607
98.6+	C <sub>8</sub> +	Octanes+	0.00004	0.00338	0.3285
125.8+	C <sub>9</sub> +	Nonanes+	0.00001	0.00082	0.0842
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00005	0.00246	0.2322
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00003	0.00256	0.2443
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00001	0.00082	0.0842
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00011	0.0090
68.73	C <sub>6</sub>	n-Hexane	0.00001	0.00086	0.0791
71.83	C <sub>6</sub>	Methylcyclopentane	0.00001	0.00031	0.0279
80.06	C <sub>6</sub>	Benzene	0.00001	0.00031	0.0196
80.78	C <sub>6</sub>	Cyclohexane	0.00001	0.00035	0.0310
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00011	0.0130
100.94	C <sub>7</sub>	Methylcyclohexane	0.00001	0.00072	0.0647
110.61	C <sub>7</sub>	Toluene	0.00001	0.00084	0.0629
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00001	0.00039	0.0337
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00010	0.0084
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**





07001396C      EE041504024W4MFIT100G      000188887      22ER889541A      22ER889542C  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

CLIVE      NOT APPLICABLE      AGAT RED DEER      BA/BB  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	Source	Received	Source	Received
				200	130	2	21

May 13, 2022 8:50      May 16, 2022      May 24, 2022      May 24, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00412	0.64171		0.00517
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00101	0.15773		0.00230
CO <sub>2</sub>	0.99357	0.00000		0.99134
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00075	0.11613		0.00062
C <sub>2</sub>	0.00003	0.00494	0.1	0.00004
C <sub>3</sub>	0.00001	0.00095	TRACE	0.00002
iC <sub>4</sub>	0.00002	0.00316	0.1	0.00020
nC <sub>4</sub>	0.00001	0.00100	TRACE	0.00000
iC <sub>5</sub>	0.00000	0.00071	TRACE	0.00000
nC <sub>5</sub>	0.00001	0.00155	TRACE	0.00000
C <sub>6</sub>	0.00005	0.00731	0.3	0.00000
C <sub>7+</sub>	0.00042	0.06481	2.5	0.00031
TOTAL	1.00000	1.00000	3.1	1.00000

WDMS Data Verification Check



### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.18	28.19	0.16	25.21
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.513	0.537	736.2	1.854
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7343.56	302.87	2164.77	108.29
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		g/m <sup>3</sup>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)
			0.00

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.83	104.31
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
16.64	0.9943
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa



07001396C	EE041504024W4MFIT	000188887	22ER889541A	22ER889542C
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>AGAT WDMS Number</i>	<i>Previous Number</i>

ENHANCE ENERGY INC	METER 090-FIT-100(ENH 0202)	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
36.2+	C <sub>6+</sub>	Hexanes+	0.00047	0.07212	2.7463
68.9+	C <sub>7+</sub>	Heptanes+	0.00042	0.06481	2.4889
98.6+	C <sub>8+</sub>	Octanes+	0.00027	0.04009	1.5758
125.8+	C <sub>9+</sub>	Nonanes+	0.00006	0.00973	0.4340
150.9+	C <sub>10+</sub>	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11+</sub>	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12+</sub>	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13+</sub>	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14+</sub>	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00015	0.02472	0.9131
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00021	0.03036	1.1418
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00006	0.00973	0.4340
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00003	0.00457	0.1611
71.83	C <sub>6</sub>	Methylcyclopentane	0.00002	0.00266	0.0920
80.06	C <sub>6</sub>	Benzene	0.00001	0.00185	0.0444
80.78	C <sub>6</sub>	Cyclohexane	0.00002	0.00324	0.1090
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00001	0.00124	0.0552
100.94	C <sub>7</sub>	Methylcyclohexane	0.00004	0.00606	0.2087
110.61	C <sub>7</sub>	Toluene	0.00006	0.00858	0.2462
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00001	0.00187	0.0621
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



08001800A      EE041504024W4MFIT100G      000188887      22ER879418A      22ER889541A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From:      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

May 03, 2022 8:20      May 05, 2022      May 12, 2022      May 12, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :  
 CC: 22CLV001

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00517	0.59530		0.00795
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00230	0.26473		0.00097
CO <sub>2</sub>	0.99134	0.00000		0.99038
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00062	0.07141		0.00065
C <sub>2</sub>	0.00004	0.00440	0.1	0.00003
C <sub>3</sub>	0.00002	0.00272	0.1	0.00000
iC <sub>4</sub>	0.00020	0.02353	0.9	0.00001
nC <sub>4</sub>	0.00000	0.00046	TRACE	0.00000
iC <sub>5</sub>	0.00000	0.00031	TRACE	0.00000
nC <sub>5</sub>	0.00000	0.00032	TRACE	0.00000
C <sub>6</sub>	0.00000	0.00033	TRACE	0.00001
C <sub>7+</sub>	0.00031	0.03649	1.8	0.00000
TOTAL	1.00000	1.00000	2.9	1.00000

WDMS Data Verification Check



### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m<sup>3</sup>)

Gross		Net	
0.18	20.91	0.16	18.79
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density

Relative		Absolute	
1.511	0.530	804.7	1.851
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties

As Sampled		Acid Gas Free	
7332.44	302.37	2250.19	101.11
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H<sub>2</sub>S) (ppm)

Field Value	Laboratory Value	g/m <sup>3</sup>
0		0.00
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other
		GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)

43.76	105.67
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure      Gas Compressibility

8.31	0.9943
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa



08001800A	EE041504024W4MFIT	000188887	22ER879418A	22ER889541A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER 090-FIT-100(ENH 0202)	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00031	0.03681	1.7761
68.9+	C <sub>7</sub> +	Heptanes+	0.00031	0.03649	1.7605
98.6+	C <sub>8</sub> +	Octanes+	0.00029	0.03420	1.6580
125.8+	C <sub>9</sub> +	Nonanes+	0.00015	0.01682	0.8821
150.9+	C <sub>10</sub> +	Decanes+	0.00001	0.00254	0.1489
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00002	0.00228	0.1024
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00014	0.01739	0.7760
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00014	0.01427	0.7332
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00001	0.00254	0.1489
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00033	0.0157
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00027	0.0126
80.06	C <sub>6</sub>	Benzene	0.00001	0.00072	0.0235
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00033	0.0151
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00002	0.00234	0.1090
110.61	C <sub>7</sub>	Toluene	0.00010	0.01106	0.4299
136.16	C <sub>8</sub>	Ethylbenzene	0.00001	0.00099	0.0441
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00005	0.00521	0.2346
144.42	C <sub>8</sub>	o-Xylene	0.00001	0.00111	0.0488
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00049	0.0283

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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11000319A      EE041504024W4MFIT100G      000188887      22ER869985A      22ER879418A  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
*Well Name      Well License      Well Status      Well Fluid Status      LSD*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	Source	Received	Source	Received
				160	190	10	21

Apr 05, 2022 10:40      Apr 07, 2022      Apr 12, 2022      Apr 12, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00795	0.82536		0.00639
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00097	0.10114		0.00034
CO <sub>2</sub>	0.99038	0.00000		0.99235
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00065	0.06725		0.00079
C <sub>2</sub>	0.00003	0.00335	0.1	0.00005
C <sub>3</sub>	0.00000	0.00000	0.0	0.00003
iC <sub>4</sub>	0.00001	0.00088	TRACE	0.00001
nC <sub>4</sub>	0.00000	0.00038	TRACE	0.00002
iC <sub>5</sub>	0.00000	0.00035	TRACE	0.00001
nC <sub>5</sub>	0.00000	0.00041	TRACE	0.00001
C <sub>6</sub>	0.00001	0.00090	TRACE	0.00000
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00000
TOTAL	1.00000	1.00000	0.2	1.00000

WDMS Data Verification Check



### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.13	13.14	0.11	11.32
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density			
Relative		Absolute	
1.507	0.203	0.0	1.846
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7322.91	301.73	1764.26	55.33
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		0.00	
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.64	0.00
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
80.52	0.9944
<i>C<sub>5+</sub>(kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>



11000319A	EE041504024W4MFIT	000188887	22ER869985A	22ER879418A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER 090-FIT-100(ENH 0202)	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00001	0.00090	0.0475
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00001	0.00090	0.0475
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



08001541A      EE041504024W4MFIT100G      000188887      22ER860667A      22ER869985A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	70	100	10	23
				Source	Received	Source	Received

Mar 07, 2022 8:50      Mar 08, 2022      Mar 11, 2022      Mar 11, 2022      Calgary - Svetlana Nikolic - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information :

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00639	0.83507		0.00620
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00034	0.04505		0.00133
CO <sub>2</sub>	0.99235	0.00000		0.99123
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00079	0.10375		0.00073
C <sub>2</sub>	0.00005	0.00631	0.2	0.00005
C <sub>3</sub>	0.00003	0.00343	0.1	0.00003
iC <sub>4</sub>	0.00001	0.00172	0.1	0.00005
nC <sub>4</sub>	0.00002	0.00230	0.1	0.00001
iC <sub>5</sub>	0.00001	0.00138	0.1	0.00001
nC <sub>5</sub>	0.00001	0.00100	TRACE	0.00001
C <sub>6</sub>	0.00000	0.00000	0.0	0.00018
C <sub>7+</sub>	0.00000	0.00000	0.0	0.00017
TOTAL	1.00000	1.00000	0.5	1.00000

WDMS Data Verification Check



### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m<sup>3</sup>)

Gross		Net	
<b>0.12</b>	<b>15.57</b>	<b>0.10</b>	<b>13.52</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density

Relative		Absolute	
<b>1.510</b>	<b>0.185</b>	<b>0.0</b>	<b>1.849</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties

As Sampled		Acid Gas Free	
<b>7334.31</b>	<b>302.26</b>	<b>1796.54</b>	<b>59.16</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H<sub>2</sub>S) (ppm)

Field Value		Laboratory Value		g/m <sup>3</sup>
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)	

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)

<b>43.71</b>	<b>0.00</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure

<b>136.40</b>
C <sub>5+</sub> (kPa)

Gas Compressibility

<b>0.9943</b>
@ 15 °C & 101.325 kPa

**Disclaimer: The result in this report has been confirmed by a duplicate run.**

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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08001541A	EE041504024W4MFIT	000188887	22ER860667A	22ER869985A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER 090-FIT-100(ENH 0202)	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00000	0.00000	0.0000
68.9+	C <sub>7</sub> +	Heptanes+	0.00000	0.00000	0.0000
98.6+	C <sub>8</sub> +	Octanes+	0.00000	0.00000	0.0000
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00000	0.0000
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00000	0.0000
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00000	0.00000	0.0000
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00000	0.00000	0.0000
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00000	0.0000
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00000	0.0000
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00000	0.00000	0.0000
68.73	C <sub>6</sub>	n-Hexane	0.00000	0.00000	0.0000
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00000	0.00000	0.0000
80.78	C <sub>6</sub>	Cyclohexane	0.00000	0.00000	0.0000
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00000	0.0000
100.94	C <sub>7</sub>	Methylcyclohexane	0.00000	0.00000	0.0000
110.61	C <sub>7</sub>	Toluene	0.00000	0.00000	0.0000
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00000	0.0000
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual





07000322A      EE041504024W4MFIT100G      000188887      22ER850589A      22ER860667A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

CLIVE      NOT APPLICABLE      AGAT RED DEER      BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)	Elevation (m)	Pressure (kPa)	Temperature (°C)
From:      To:	KB      GRD	120      150 Source      Received	10      21 Source      Received

Feb 09, 2022 8:45      Feb 11, 2022      Feb 17, 2022      Feb 17, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : METER 090-FIT-100(ENH0202)

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00620	0.70620		0.01231
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00133	0.15140		0.00707
CO <sub>2</sub>	0.99123	0.00000		0.97616
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00073	0.08257		0.00222
C <sub>2</sub>	0.00005	0.00607	0.2	0.00005
C <sub>3</sub>	0.00003	0.00338	0.1	0.00000
iC <sub>4</sub>	0.00005	0.00512	0.2	0.00000
nC <sub>4</sub>	0.00001	0.00162	0.1	0.00000
iC <sub>5</sub>	0.00001	0.00116	TRACE	0.00000
nC <sub>5</sub>	0.00001	0.00135	0.1	0.00000
C <sub>6</sub>	0.00018	0.02053	1.0	0.00027
C <sub>7+</sub>	0.00017	0.02059	1.1	0.00192
TOTAL	1.00000	1.00000	2.7	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.19	21.34	0.17	19.09
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.510	0.405	725.2	1.850
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7329.96	302.22	2022.87	87.08
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		g/m <sup>3</sup>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.73	100.32
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
33.91	0.9943
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeded compare limits: C1, C7**



07000322A	EE041504024W4MFIT	000188887	22ER850589A	22ER860667A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	METER 090-FIT-100(ENH 0202)	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00035	0.04112	2.0381
68.9+	C <sub>7</sub> +	Heptanes+	0.00017	0.02059	1.0546
98.6+	C <sub>8</sub> +	Octanes+	0.00004	0.00570	0.3103
125.8+	C <sub>9</sub> +	Nonanes+	0.00001	0.00231	0.1399
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00084	0.0550
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00013	0.01489	0.7443
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00003	0.00339	0.1704
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00001	0.00148	0.0849
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00084	0.0550
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00001	0.00103	0.0442
68.73	C <sub>6</sub>	n-Hexane	0.00010	0.01143	0.5513
71.83	C <sub>6</sub>	Methylcyclopentane	0.00004	0.00486	0.2298
80.06	C <sub>6</sub>	Benzene	0.00001	0.00073	0.0238
80.78	C <sub>6</sub>	Cyclohexane	0.00001	0.00139	0.0641
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00000	0.00054	0.0329
100.94	C <sub>7</sub>	Methylcyclohexane	0.00001	0.00096	0.0450
110.61	C <sub>7</sub>	Toluene	0.00001	0.00103	0.0406
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00050	0.0227
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00040	0.0234

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual



11001151A      EE041504024W4MFIT100G      000188887      21ER836857A      22ER850589A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      METER 090-FIT-100(ENH 0202)      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

CLIVE      NOT APPLICABLE      AGAT RED DEER      BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	Source	Received	Source	Received
				130	150	5	21

Jan 10, 2022 8:55      Jan 11, 2022      Jan 13, 2022      Jan 13, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : METER 090-FIT-100(ENH0202)

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.01231	0.51662		0.00745
He	0.00000	0.00000		0.00000
N <sub>2</sub>	0.00707	0.29660		0.00055
CO <sub>2</sub>	0.97616	0.00000		0.99153
H <sub>2</sub> S	0.00000	0.00000		0.00000
C <sub>1</sub>	0.00222	0.09320		0.00047
C <sub>2</sub>	0.00005	0.00201	0.2	0.00000
C <sub>3</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>4</sub>	0.00000	0.00000	0.0	0.00000
iC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
nC <sub>5</sub>	0.00000	0.00000	0.0	0.00000
C <sub>6</sub>	0.00027	0.01105	1.4	0.00000
C <sub>7+</sub>	0.00192	0.08052	11.2	0.00000
TOTAL	1.00000	1.00000	12.8	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
0.68	28.54	0.61	25.72
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.500	0.702	761.6	1.838
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7258.12	299.86	2388.95	125.07
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
0		g/m <sup>3</sup>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)
			0.00

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
43.45	105.50
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
12.76	0.9941
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeded compare limits: N2, C1, C7**



11001151A	EE041504024W4MFIT	000188887	21ER836857A	22ER850589A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>AGAT WDMS Number</i>	<i>Previous Number</i>

ENHANCE ENERGY INC	METER 090-FIT-100(ENH 0202)	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 CO2 ACTL 20 CO2 ANALYZER	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00219	0.09157	12.6268
68.9+	C <sub>7</sub> +	Heptanes+	0.00192	0.08052	11.2364
98.6+	C <sub>8</sub> +	Octanes+	0.00145	0.06073	8.5777
125.8+	C <sub>9</sub> +	Nonanes+	0.00054	0.02283	3.3744
150.9+	C <sub>10</sub> +	Decanes+	0.00007	0.00274	0.4487
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00047	0.01979	2.6587
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00091	0.03790	5.2033
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00047	0.02009	2.9257
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00007	0.00274	0.4487
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00009	0.00364	0.4222
68.73	C <sub>6</sub>	n-Hexane	0.00014	0.00566	0.7412
71.83	C <sub>6</sub>	Methylcyclopentane	0.00000	0.00000	0.0000
80.06	C <sub>6</sub>	Benzene	0.00007	0.00310	0.2757
80.78	C <sub>6</sub>	Cyclohexane	0.00007	0.00274	0.3429
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00002	0.00090	0.1492
100.94	C <sub>7</sub>	Methylcyclohexane	0.00020	0.00828	1.0599
110.61	C <sub>7</sub>	Toluene	0.00029	0.01212	1.2918
136.16	C <sub>8</sub>	Ethylbenzene	0.00003	0.00132	0.1624
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00016	0.00690	0.8524
144.42	C <sub>8</sub>	o-Xylene	0.00004	0.00168	0.2038
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00002	0.00076	0.1205

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



08000199C      EE041504024W4DRYOUTLET      000188788      22GR965975A      22GR974580C  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      DEXPRO DRY OUTLET GAS      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
*Well Name*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BA/BB  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From:      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Dec 01, 2022 11:30      Dec 02, 2022      Dec 08, 2022      Dec 08, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information : FIELD H2S BY TUT = 2.42%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0061	0.0738		0.0063
He	TRACE	TRACE		0.0001
N <sub>2</sub>	0.0059	0.0714		0.0060
CO <sub>2</sub>	0.8932	0.0000		0.8737
H <sub>2</sub> S	0.0242	0.0000		0.0187
C <sub>1</sub>	0.0520	0.6296		0.0714
C <sub>2</sub>	0.0068	0.0823	24.2	0.0086
C <sub>3</sub>	0.0056	0.0678	20.6	0.0068
iC <sub>4</sub>	0.0009	0.0109	3.9	0.0015
nC <sub>4</sub>	0.0027	0.0327	11.4	0.0033
iC <sub>5</sub>	0.0007	0.0085	3.4	0.0009
nC <sub>5</sub>	0.0008	0.0097	3.9	0.0011
C <sub>6</sub>	0.0005	0.0061	2.7	0.0007
C <sub>7+</sub>	0.0006	0.0072	3.9	0.0009
TOTAL	1.0000	1.0000	74.0	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
<b>4.49</b>	<b>47.01</b>	<b>0.13</b>	<b>4.07</b>	<b>42.81</b>
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
<b>1.451</b>	<b>0.789</b>	<b>3.621</b>	<b>694.7</b>	<b>1.777</b>
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7152.6</b>	<b>298.5</b>	<b>4185.5</b>	<b>215.5</b>
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>24200</b>		<b>34.81</b>	
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
<b>42.0</b>	<b>104.9</b>
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
<b>79.57</b>	<b>0.9925</b>
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check 

**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: H<sub>2</sub>S, C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, iC<sub>4</sub>, nC<sub>4</sub>**



05003747A      EE041504024W4DRYOUTLET      000188788      22GR949110B      22GR965975A  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      DEXPRO DRY OUTLET GAS      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
*Well Name*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BA/BB  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	3790	4200	12	23
Test Type		Test No.		Source		Received	

Nov 04, 2022 11:45      Nov 07, 2022      Nov 11, 2022      Nov 11, 2022      Calgary - Bernie Diep - Supervisor  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information : FIELD H2S BY TUT = 1.874%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0063	0.0586		0.0061
He	0.0001	0.0009		0.0001
N <sub>2</sub>	0.0060	0.0558		0.0065
CO <sub>2</sub>	0.8737	0.0000		0.8970
H <sub>2</sub> S	0.0187	0.0000		0.0182
C <sub>1</sub>	0.0714	0.6635		0.0540
C <sub>2</sub>	0.0086	0.0800	30.6	0.0071
C <sub>3</sub>	0.0068	0.0632	25.0	0.0055
iC <sub>4</sub>	0.0015	0.0139	6.5	0.0010
nC <sub>4</sub>	0.0033	0.0307	13.9	0.0026
iC <sub>5</sub>	0.0009	0.0084	4.4	0.0006
nC <sub>5</sub>	0.0011	0.0102	5.3	0.0007
C <sub>6</sub>	0.0007	0.0065	3.8	0.0003
C <sub>7+</sub>	0.0009	0.0083	5.8	0.0003
TOTAL	1.0000	1.0000	95.3	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
5.66	48.04	0.20	5.12	43.75
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
1.435	0.791	3.675	696.8	1.757
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7070.5	296.2	4246.7	218.5
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
18740		26.90	
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
41.6	106.4
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
76.67	0.9922
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check



**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, NC<sub>4</sub>, C<sub>7</sub>**

07000983B    EE041504024W4DRYOUTLET    000188788    22GR937859A    22GR949110B  
 Container Identification    Sample Point Code    Meter Code    AGAT WDMS Number    Previous Number    Laboratory Number

ENHANCE ENERGY INC    DEXPRO DRY OUTLET GAS    04-15-040-24W4  
 Operator Name    Sampling Point    Unique Well Identifier

ENHANCE CLIVE 4-15 BATTERY    NOT APPLICABLE    AGAT RED DEER    BA/BB  
 Well Name    Well License    Well Status    Well Fluid Status    LSD

CLIVE    NOT APPLICABLE    AGAT RED DEER    BA/BB  
 Field or Area    Pool or Zone    Sampler's Company    Name of Sampler

Test Interval (mKB)	Elevation (m)	Pressure (kPa)	Temperature (°C)
From:    To:	KB    GRD	3800    3500 Source    Received	10    23 Source    Received

Oct 03, 2022 9:50    Oct 04, 2022    Oct 07, 2022    Oct 07, 2022    Calgary - Bernie Diep - Supervisor  
 Date/Time Sampled    Date Received    Date Analyzed    Date Reported    Location - Approved By - Title

Other Information : FIELD H2S BY TUT = 1.82%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0061	0.0719		0.0059
He	0.0001	0.0012		0.0001
N <sub>2</sub>	0.0065	0.0767		0.0063
CO <sub>2</sub>	0.8970	0.0000		0.8759
H <sub>2</sub> S	0.0182	0.0000		0.0189
C <sub>1</sub>	0.0540	0.6366		0.0586
C <sub>2</sub>	0.0071	0.0837	25.2	0.0081
C <sub>3</sub>	0.0055	0.0649	20.2	0.0077
iC <sub>4</sub>	0.0010	0.0118	4.4	0.0015
nC <sub>4</sub>	0.0026	0.0307	10.9	0.0049
iC <sub>5</sub>	0.0006	0.0071	2.9	0.0021
nC <sub>5</sub>	0.0007	0.0083	3.4	0.0030
C <sub>6</sub>	0.0003	0.0035	1.6	0.0028
C <sub>7+</sub>	0.0003	0.0036	1.9	0.0042
TOTAL	1.0000	1.0000	70.5	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m<sup>3</sup>)

Gross			Net	
<b>4.30</b>	<b>45.27</b>	<b>0.06</b>	<b>3.89</b>	<b>41.21</b>
Air Free as Received	Moisture & Acid Gas Free	C <sub>7+</sub> Moisture Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density

Relative			Absolute	
<b>1.449</b>	<b>0.765</b>	<b>3.621</b>	<b>694.7</b>	<b>1.775</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Moisture Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties

As Sampled		Acid Gas Free	
<b>7136.9</b>	<b>297.5</b>	<b>4196.8</b>	<b>211.7</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H<sub>2</sub>S) (ppm)

Field Value		Laboratory Value		g/m <sup>3</sup>
	<b>18200</b>			
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)	

Calculated Molecular Weight (Moisture Free as Received) (g/mol)

<b>42.0</b>	<b>104.9</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure

<b>90.85</b>	<b>0.9936</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

Gas Compressibility

WDMS Data Verification Check



**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, NC<sub>4</sub>, C<sub>6</sub>, C<sub>7</sub>**

00019151A      EE041504024W4DRYOUTLET      000188788      22GR926845B      22GR937859A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      DEXPRO DRY OUTLET GAS      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
 Well Name

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From:      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Sep 01, 2022 11:35      Sep 06, 2022      Sep 09, 2022      Sep 09, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : FIELD H2S BY TUT = 1.89%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0059	0.0561		0.0061
He	0.0001	0.0010		0.0001
N <sub>2</sub>	0.0063	0.0599		0.0070
CO <sub>2</sub>	0.8759	0.0000		0.8657
H <sub>2</sub> S	0.0189	0.0000		0.0188
C <sub>1</sub>	0.0586	0.5568		0.0761
C <sub>2</sub>	0.0081	0.0770	28.8	0.0085
C <sub>3</sub>	0.0077	0.0732	28.3	0.0076
iC <sub>4</sub>	0.0015	0.0143	6.5	0.0014
nC <sub>4</sub>	0.0049	0.0466	20.6	0.0040
iC <sub>5</sub>	0.0021	0.0200	10.3	0.0010
nC <sub>5</sub>	0.0030	0.0285	14.5	0.0013
C <sub>6</sub>	0.0028	0.0266	15.4	0.0009
C <sub>7+</sub>	0.0042	0.0400	26.9	0.0015
TOTAL	1.0000	1.0000	151.3	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
<b>6.97</b>	<b>61.68</b>	<b>0.90</b>	<b>6.34</b>	<b>56.36</b>
Air Free as Received	Moisture & Acid Gas Free	C <sub>7+</sub> Moisture Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density				
Relative			Absolute	
<b>1.461</b>	<b>1.029</b>	<b>3.632</b>	<b>695.1</b>	<b>1.790</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Moisture Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7063.2</b>	<b>299.7</b>	<b>4101.9</b>	<b>249.9</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>18900</b>		<b>27.19</b>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
<b>42.3</b>	<b>105.2</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
<b>61.96</b>	<b>0.9828</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check 

**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: C<sub>1</sub>, NC<sub>4</sub>, C<sub>6</sub>, C<sub>7</sub>**





11001108B      EE041504024W4DRYOUTLET      000188788      22GR915637B      22GR926845B  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      DEXPRO DRY OUTLET GAS      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
*Well Name*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From:      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Aug 03, 2022 12:05      Aug 05, 2022      Aug 12, 2022      Aug 12, 2022      Calgary - Svetlana Nikolic - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information : FIELD H2S BY TUT = 1.882%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0061	0.0528		0.0063
He	0.0001	0.0009		0.0001
N <sub>2</sub>	0.0070	0.0606		0.0066
CO <sub>2</sub>	0.8657	0.0000		0.8783
H <sub>2</sub> S	0.0188	0.0000		0.0172
C <sub>1</sub>	0.0761	0.6588		0.0705
C <sub>2</sub>	0.0085	0.0736	30.2	0.0086
C <sub>3</sub>	0.0076	0.0658	27.9	0.0060
iC <sub>4</sub>	0.0014	0.0121	6.1	0.0011
nC <sub>4</sub>	0.0040	0.0346	16.8	0.0026
iC <sub>5</sub>	0.0010	0.0087	4.9	0.0008
nC <sub>5</sub>	0.0013	0.0113	6.3	0.0010
C <sub>6</sub>	0.0009	0.0078	4.9	0.0005
C <sub>7+</sub>	0.0015	0.0130	9.7	0.0004
TOTAL	1.0000	1.0000	106.8	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
<b>6.19</b>	<b>49.36</b>	<b>0.33</b>	<b>5.60</b>	<b>44.97</b>
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
<b>1.432</b>	<b>0.819</b>	<b>3.686</b>	<b>697.2</b>	<b>1.754</b>
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7045.6</b>	<b>295.9</b>	<b>4242.9</b>	<b>221.9</b>
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
	<b>18820</b>		<b>27.05</b>
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
<b>41.5</b>	<b>106.7</b>
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
<b>68.80</b>	<b>0.9904</b>
<i>C<sub>s+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check



**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: C<sub>1</sub>, C<sub>3</sub>, NC<sub>4</sub>, C<sub>7</sub>**

Disclaimer: The result in this report has been confirmed by a duplicate run.



13001496D <i>Container Identification</i>	EE041504024W4WETINLET <i>Sample Point Code</i>	000189182 <i>Meter Code</i>	22GR901610C <i>Previous Number</i>	22GR915637D <i>Laboratory Number</i>
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ENHANCE ENERGY INC <i>Operator Name</i>	DEXPRO WET INLET GAS <i>Sampling Point</i>	04-15-040-24W4 <i>Unique Well Identifier</i>
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ENHANCE CLIVE 4-15 BATTERY <i>Well Name</i>	Well License	Well Status	Well Fluid Status	LSD
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CLIVE <i>Field or Area</i>	NOT APPLICABLE <i>Pool or Zone</i>	AGAT RED DEER <i>Sampler's Company</i>	BB/BA <i>Name of Sampler</i>
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Test Interval (mKB)	Elevation (m)	Pressure (kPa)	Temperature (°C)
From : To:	KB GRD	3770 3400 <i>Source Received</i>	11 23 <i>Source Received</i>

Jul 04, 2022 10:50 <i>Date/Time Sampled</i>	Jul 06, 2022 <i>Date Received</i>	Jul 08, 2022 <i>Date Analyzed</i>	Jul 08, 2022 <i>Date Reported</i>	Calgary - Bernie Diep - Supervisor <i>Location - Approved By - Title</i>
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Other Information : FIELD H2S BY TUT: 1.72%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0062	0.0590		0.0065
He	0.0001	0.0010		0.0001
N <sub>2</sub>	0.0067	0.0637		0.0067
CO <sub>2</sub>	0.8777	0.0000		0.8833
H <sub>2</sub> S	0.0172	0.0000		0.0151
C <sub>1</sub>	0.0706	0.6716		0.0660
C <sub>2</sub>	0.0085	0.0809	30.2	0.0081
C <sub>3</sub>	0.0060	0.0571	22.0	0.0067
iC <sub>4</sub>	0.0012	0.0114	5.2	0.0011
nC <sub>4</sub>	0.0030	0.0285	12.6	0.0031
iC <sub>5</sub>	0.0009	0.0086	4.4	0.0008
nC <sub>5</sub>	0.0010	0.0095	4.8	0.0010
C <sub>6</sub>	0.0005	0.0048	2.7	0.0006
C <sub>7+</sub>	0.0004	0.0039	2.5	0.0009
TOTAL	1.0000	1.0000	84.4	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
<b>5.27</b>	45.90	0.08	<b>4.76</b>	41.77
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
<b>1.434</b>	0.762	3.581	693.0	1.756
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7076.7	295.8	4254.2	213.6
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
17200		24.74	
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
41.5	103.7
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
91.10	0.9935
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check



**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: H<sub>2</sub>S, C<sub>1</sub>, C<sub>3</sub>**



05002576B      EE041504024W4DRYOUTLET      000188788      22GR901610D      22GR915637B  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      DEXPRO DRY OUTLET GAS      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
*Well Name*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	3700	3400	11	23
Test Type		Test No.		Source		Received	

Jul 04, 2022 10:40      Jul 06, 2022      Jul 08, 2022      Jul 08, 2022      Calgary - Bernie Diep - Supervisor  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information :      FIELD H2S BY TUT: 1.72%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0063	0.0603		0.0061
He	0.0001	0.0010		0.0001
N <sub>2</sub>	0.0066	0.0632		0.0068
CO <sub>2</sub>	0.8783	0.0000		0.8726
H <sub>2</sub> S	0.0172	0.0000		0.0160
C <sub>1</sub>	0.0705	0.6744		0.0738
C <sub>2</sub>	0.0086	0.0823	30.6	0.0085
C <sub>3</sub>	0.0060	0.0574	22.0	0.0074
iC <sub>4</sub>	0.0011	0.0105	4.8	0.0012
nC <sub>4</sub>	0.0026	0.0249	10.9	0.0038
iC <sub>5</sub>	0.0008	0.0077	3.9	0.0010
nC <sub>5</sub>	0.0010	0.0096	4.8	0.0012
C <sub>6</sub>	0.0005	0.0048	2.7	0.0007
C <sub>7+</sub>	0.0004	0.0039	2.5	0.0008
TOTAL	1.0000	1.0000	82.2	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
<b>5.20</b>	<b>45.47</b>	<b>0.08</b>	<b>4.70</b>	<b>41.37</b>
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
<b>1.434</b>	<b>0.754</b>	<b>3.581</b>	<b>693.0</b>	<b>1.756</b>
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7078.8</b>	<b>295.7</b>	<b>4255.5</b>	<b>212.3</b>
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>17200</b>		<b>24.74</b>	
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
<b>41.5</b>	<b>103.7</b>
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
<b>89.25</b>	<b>0.9937</b>
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check



**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: C<sub>1</sub>, C<sub>3</sub>, NC<sub>4</sub>**



11002163D      EE041504024W4DRYOUTLET      000188788      22GR889530B      22GR901610D  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      DEXPRO DRY OUTLET GAS      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
*Well Name*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	3785	3350	11	21
Test Type		Test No.		Source		Received	

Jun 01, 2022 12:00      Jun 02, 2022      Jun 08, 2022      Jun 08, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information : FIELD H2S BY TUT = 1.08%/LAB = 1.60%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0061	0.0548		0.0063
He	0.0001	0.0009		0.0001
N <sub>2</sub>	0.0068	0.0610		0.0070
CO <sub>2</sub>	0.8726	0.0000		0.8613
H <sub>2</sub> S	0.0160	0.0000		0.0227
C <sub>1</sub>	0.0738	0.6624		0.0790
C <sub>2</sub>	0.0085	0.0763	30.2	0.0086
C <sub>3</sub>	0.0074	0.0664	27.2	0.0072
iC <sub>4</sub>	0.0012	0.0108	5.2	0.0012
nC <sub>4</sub>	0.0038	0.0341	16.0	0.0033
iC <sub>5</sub>	0.0010	0.0090	4.9	0.0008
nC <sub>5</sub>	0.0012	0.0108	5.8	0.0010
C <sub>6</sub>	0.0007	0.0063	3.8	0.0006
C <sub>7+</sub>	0.0008	0.0072	5.2	0.0009
TOTAL	1.0000	1.0000	98.3	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
5.76	47.94	0.17	5.21	43.65
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
1.433	0.795	3.641	695.5	1.755
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7054.9	295.7	4252.3	218.9
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
		16000	23.02
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
41.5	105.5
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
81.20	0.9923
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check



**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: H<sub>2</sub>S, C<sub>1</sub>**



11005778C      EE041504024W4WETINLET      000189182      22GR889530C      22GR901610C  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      DEXPRO WET INLET GAS      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
*Well Name*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	3800	3300	11	21
Test Type		Test No.		Source		Received	

Jun 01, 2022 11:45      Jun 02, 2022      Jun 08, 2022      Jun 08, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information : FIELD H2S BY TUT = 1.08%/LAB = 1.51%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0065	0.0640		0.0064
He	0.0001	0.0010		0.0001
N <sub>2</sub>	0.0067	0.0659		0.0172
CO <sub>2</sub>	0.8833	0.0000		0.8507
H <sub>2</sub> S	0.0151	0.0000		0.0227
C <sub>1</sub>	0.0660	0.6497		0.0781
C <sub>2</sub>	0.0081	0.0797	28.8	0.0085
C <sub>3</sub>	0.0067	0.0659	24.6	0.0069
iC <sub>4</sub>	0.0011	0.0108	4.8	0.0011
nC <sub>4</sub>	0.0031	0.0305	13.0	0.0032
iC <sub>5</sub>	0.0008	0.0079	3.9	0.0008
nC <sub>5</sub>	0.0010	0.0098	4.8	0.0011
C <sub>6</sub>	0.0006	0.0059	3.3	0.0009
C <sub>7+</sub>	0.0009	0.0089	6.0	0.0023
TOTAL	1.0000	1.0000	89.2	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
5.21	47.33	0.20	4.71	43.10
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
1.440	0.789	3.729	698.8	1.764
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7080.7	296.2	4219.1	216.5
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
		15100	21.72
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other GC-SCD (ASTM D5504)</i>	

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
41.7	108.0
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
75.00	0.9915
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check 

**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: H<sub>2</sub>S, C<sub>1</sub>, C<sub>7</sub>**



00011535C      EE041504024W4WETINLET      000189182      21GR766371D      22GR889530C  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      DEXPRO WET INLET GAS      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
*Well Name*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	3810	3500	11	21
Test Type		Test No.		Source		Received	

May 03, 2022 9:35      May 05, 2022      May 12, 2022      May 12, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information : FIELD H2S BY TUT = 2.27%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0064	0.0506		0.0066
He	0.0001	0.0008		TRACE
N <sub>2</sub>	0.0172	0.1359		0.0056
CO <sub>2</sub>	0.8507	0.0000		0.8967
H <sub>2</sub> S	0.0227	0.0000		0.0156
C <sub>1</sub>	0.0781	0.6168		0.0536
C <sub>2</sub>	0.0085	0.0671	30.2	0.0073
C <sub>3</sub>	0.0069	0.0545	25.4	0.0063
iC <sub>4</sub>	0.0011	0.0087	4.8	0.0010
nC <sub>4</sub>	0.0032	0.0253	13.5	0.0031
iC <sub>5</sub>	0.0008	0.0063	3.9	0.0009
nC <sub>5</sub>	0.0011	0.0087	5.3	0.0012
C <sub>6</sub>	0.0009	0.0071	4.9	0.0009
C <sub>7+</sub>	0.0023	0.0182	15.5	0.0012
TOTAL	1.0000	1.0000	103.5	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
<b>6.30</b>	<b>45.14</b>	<b>0.52</b>	<b>5.70</b>	<b>41.12</b>
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
<b>1.424</b>	<b>0.826</b>	<b>3.839</b>	<b>702.8</b>	<b>1.744</b>
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7007.7</b>	<b>294.0</b>	<b>4168.6</b>	<b>212.1</b>
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>22700</b>		<b>32.66</b>	
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
<b>41.2</b>	<b>111.2</b>
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
<b>54.24</b>	<b>0.9886</b>
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check



**Exceeds normal limits: CO<sub>2</sub>, H<sub>2</sub>**  
**Exceeded compare limits: H<sub>2</sub>S, C<sub>1</sub>, C<sub>2</sub>, C<sub>3</sub>, C<sub>7</sub>**



04001421B      EE041504024W4DRYOUTLET      000188788      21G780895A      22GR889530B  
*Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number*

ENHANCE ENERGY INC      DEXPRO DRY OUTLET GAS      04-15-040-24W4  
*Operator Name      Sampling Point      Unique Well Identifier*

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
*Well Name*

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
*Field or Area      Pool or Zone      Sampler's Company      Name of Sampler*

Test Interval (mKB)		Elevation (m)		Pressure (kPa)		Temperature (°C)	
From :	To:	KB	GRD	3780	3300	11	21
Test Type		Test No.		Source		Received	

May 03, 2022 9:45      May 05, 2022      May 12, 2022      May 12, 2022      Calgary - Gerry Ecker - Reporter  
*Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title*

Other Information : FIELD H2S BY TUT = 2.27%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.0063	0.0543		0.0063
He	0.0001	0.0009		TRACE
N <sub>2</sub>	0.0070	0.0603		0.0053
CO <sub>2</sub>	0.8613	0.0000		0.9133
H <sub>2</sub> S	0.0227	0.0000		0.0175
C <sub>1</sub>	0.0790	0.6811		0.0388
C <sub>2</sub>	0.0086	0.0741	30.6	0.0057
C <sub>3</sub>	0.0072	0.0621	26.5	0.0051
iC <sub>4</sub>	0.0012	0.0103	5.2	0.0010
nC <sub>4</sub>	0.0033	0.0284	13.9	0.0030
iC <sub>5</sub>	0.0008	0.0069	3.9	0.0009
nC <sub>5</sub>	0.0010	0.0086	4.8	0.0012
C <sub>6</sub>	0.0006	0.0052	3.3	0.0008
C <sub>7+</sub>	0.0009	0.0078	6.0	0.0011
TOTAL	1.0000	1.0000	94.2	1.0000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )				
Gross			Net	
<b>6.00</b>	46.66	0.20	<b>5.42</b>	42.47
<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>Air Free as Received</i>	<i>Moisture &amp; Acid Gas Free</i>

Calculated Density				
Relative			Absolute	
<b>1.425</b>	0.772	3.729	698.8	1.745
<i>Moisture Free As Received</i>	<i>Moisture &amp; Acid Gas Free</i>	<i>C<sub>7+</sub> Moisture Free</i>	<i>C<sub>7+</sub> Density (kg/m<sup>3</sup>)</i>	<i>Total Sample Density (kg/m<sup>3</sup>)</i>

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7053.0	295.4	4266.2	215.3
<i>pPc (kPa)</i>	<i>pTc (K)</i>	<i>pPc (kPa)</i>	<i>pTc (K)</i>

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
22700		32.66	
<i>Stain Tube (GPA 2377)</i>	<i>Tutweiler (GPA C1)</i>	<i>Other</i>	<i>GC-SCD (ASTM D5504)</i>

Calculated Molecular Weight (Moisture Free as Received) (g/mol)	
41.3	108.0
<i>Total Sample</i>	<i>C<sub>7+</sub> Fraction</i>

Calculated Vapour Pressure	Gas Compressibility
75.00	0.9921
<i>C<sub>5+</sub> (kPa)</i>	<i>@ 15 °C &amp; 101.325 kPa</i>

WDMS Data Verification Check



**Exceeds normal limits: CO2, H2**  
**Exceeded compare limits: H2S, C1, C2, C3**



05002651B      EE041504024W4WETINLET      000189182      22ER869990A      22ER879427B  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      DEXPRO WET INLET GAS      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
 Well Name

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From:      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Apr 05, 2022 11:50      Apr 07, 2022      Apr 12, 2022      Apr 12, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : FIELD H2S BY TUT = 2.27%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00708	0.06152		0.00666
He	0.00007	0.00061		0.00004
N <sub>2</sub>	0.00843	0.07325		0.00601
CO <sub>2</sub>	0.86224	0.00000		0.89608
H <sub>2</sub> S	0.02270	0.00000		0.01910
C <sub>1</sub>	0.07265	0.63158		0.05229
C <sub>2</sub>	0.00858	0.07457	30.5	0.00693
C <sub>3</sub>	0.00694	0.06029	25.5	0.00585
iC <sub>4</sub>	0.00112	0.00973	4.9	0.00097
nC <sub>4</sub>	0.00323	0.02810	13.6	0.00279
iC <sub>5</sub>	0.00093	0.00810	4.6	0.00074
nC <sub>5</sub>	0.00122	0.01063	5.9	0.00090
C <sub>6</sub>	0.00122	0.01052	6.6	0.00059
C <sub>7+</sub>	0.00359	0.03109	21.8	0.00105
TOTAL	1.00000	1.00000	113.3	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>6.44</b>	<b>51.26</b>	<b>5.82</b>	<b>46.28</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
<b>1.436</b>	<b>0.862</b>	<b>737.0</b>	<b>1.759</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7045.74</b>	<b>296.52</b>	<b>4177.13</b>	<b>224.31</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>22700</b>		<b>32.66</b>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>41.59</b>	<b>106.45</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure		Gas Compressibility	
<b>53.32</b>	<b>0.9936</b>	@ 15 °C & 101.325 kPa	
C <sub>5+</sub> (kPa)			

WDMS Data Verification Check



**Exceeded compare limits: H2S, C1, C2, C3, C6, C7**





05002651B	EE041504024W4WET1	000189182	22ER869990A	22ER879427B
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	DEXPRO WET INLET GAS	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 BATTERY	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00481	0.04161	28.3805
68.9+	C <sub>7</sub> +	Heptanes+	0.00359	0.03109	21.8133
98.6+	C <sub>8</sub> +	Octanes+	0.00222	0.01906	14.0565
125.8+	C <sub>9</sub> +	Nonanes+	0.00087	0.00729	5.6294
150.9+	C <sub>10</sub> +	Decanes+	0.00023	0.00183	1.4698
174.3+	C <sub>11</sub> +	Undecanes+	0.00001	0.00009	0.0790
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00137	0.01203	7.7567
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00135	0.01177	8.4271
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00064	0.00546	4.1596
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00021	0.00168	1.3544
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00001	0.00009	0.0790
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00012	0.00101	0.5634
68.73	C <sub>6</sub>	n-Hexane	0.00055	0.00479	3.0278
71.83	C <sub>6</sub>	Methylcyclopentane	0.00028	0.00244	1.5138
80.06	C <sub>6</sub>	Benzene	0.00016	0.00138	0.5939
80.78	C <sub>6</sub>	Cyclohexane	0.00015	0.00134	0.8082
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00015	0.00130	1.0371
100.94	C <sub>7</sub>	Methylcyclohexane	0.00027	0.00238	1.4679
110.61	C <sub>7</sub>	Toluene	0.00018	0.00156	0.8042
136.16	C <sub>8</sub>	Ethylbenzene	0.00004	0.00033	0.1977
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00010	0.00083	0.4930
144.42	C <sub>8</sub>	o-Xylene	0.00004	0.00031	0.1817
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00003	0.00022	0.1705

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



05002582A EE041504024W4DRYOUTLET 000188788 22ER86990B 22ER879427A  
 Container Identification Sample Point Code Meter Code AGAT WDMS Number Previous Number Laboratory Number

ENHANCE ENERGY INC DEXPRO DRY OUTLET GAS 04-15-040-24W4  
 Operator Name Sampling Point Unique Well Identifier

ENHANCE CLIVE 4-15 BATTERY  
 Well Name Well License Well Status Well Fluid Status LSD

CLIVE NOT APPLICABLE AGAT RED DEER BB/BA  
 Field or Area Pool or Zone Sampler's Company Name of Sampler

Test Interval (mKB) Elevation (m) Pressure (kPa) Temperature (°C)  
 From: To: Test Type Test No. KB GRD Source Received Source Received

Apr 05, 2022 12:05 Apr 07, 2022 Apr 12, 2022 Apr 12, 2022 Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled Date Received Date Analyzed Date Reported Location - Approved By - Title

Other Information : FIELD H2S BY TUT = 2.40%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00716	0.06173		0.00665
He	0.00008	0.00066		0.00004
N <sub>2</sub>	0.00861	0.07417		0.00573
CO <sub>2</sub>	0.85994	0.00000		0.89591
H <sub>2</sub> S	0.02400	0.00000		0.01910
C <sub>1</sub>	0.07671	0.66106		0.05298
C <sub>2</sub>	0.00883	0.07608	31.4	0.00696
C <sub>3</sub>	0.00693	0.05970	25.4	0.00594
iC <sub>4</sub>	0.00108	0.00928	4.7	0.00098
nC <sub>4</sub>	0.00305	0.02627	12.8	0.00284
iC <sub>5</sub>	0.00077	0.00663	3.8	0.00075
nC <sub>5</sub>	0.00094	0.00810	4.5	0.00092
C <sub>6</sub>	0.00065	0.00555	3.5	0.00060
C <sub>7+</sub>	0.00125	0.01078	7.4	0.00060
TOTAL	1.00000	1.00000	93.6	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m<sup>3</sup>)

Gross		Net	
<b>5.94</b>	<b>46.22</b>	<b>5.38</b>	<b>41.82</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density

Relative		Absolute	
<b>1.425</b>	<b>0.775</b>	<b>739.3</b>	<b>1.746</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties

As Sampled		Acid Gas Free	
<b>7050.61</b>	<b>295.27</b>	<b>4228.44</b>	<b>213.39</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H<sub>2</sub>S) (ppm)

Field Value		Laboratory Value		g/m <sup>3</sup>
<b>24000</b>				
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)	

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)

<b>41.27</b>	<b>104.17</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure Gas Compressibility

<b>74.10</b>	<b>0.9940</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check 

**Exceeded compare limits: H2S, C1, C2, C3, C7**



05002582A	EE041504024W4DRY	000188788	22ER869990B	22ER879427A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	DEXPRO DRY OUTLET GAS	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 BATTERY	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00190	0.01633	10.9229
68.9+	C <sub>7</sub> +	Heptanes+	0.00125	0.01078	7.4387
98.6+	C <sub>8</sub> +	Octanes+	0.00069	0.00590	4.3124
125.8+	C <sub>9</sub> +	Nonanes+	0.00026	0.00218	1.6516
150.9+	C <sub>10</sub> +	Decanes+	0.00007	0.00055	0.4262
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0000
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00056	0.00488	3.1263
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00043	0.00373	2.6607
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00019	0.00163	1.2254
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00007	0.00055	0.4262
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0000
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00007	0.00062	0.3521
68.73	C <sub>6</sub>	n-Hexane	0.00027	0.00233	1.4844
71.83	C <sub>6</sub>	Methylcyclopentane	0.00013	0.00116	0.7239
80.06	C <sub>6</sub>	Benzene	0.00008	0.00065	0.2805
80.78	C <sub>6</sub>	Cyclohexane	0.00007	0.00061	0.3717
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00006	0.00050	0.4004
100.94	C <sub>7</sub>	Methylcyclohexane	0.00011	0.00091	0.5669
110.61	C <sub>7</sub>	Toluene	0.00006	0.00051	0.2631
136.16	C <sub>8</sub>	Ethylbenzene	0.00001	0.00009	0.0551
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00004	0.00031	0.1860
144.42	C <sub>8</sub>	o-Xylene	0.00001	0.00009	0.0527
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00001	0.00007	0.0540

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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05002726B      EE041504024W4DRYOUTLET      000188788      22ER858920E      22ER869990B  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      DEXPRO DRY OUTLET GAS      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
 Well Name

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From:      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Mar 07, 2022 10:15      Mar 08, 2022      Mar 11, 2022      Mar 11, 2022      Calgary - Bernie Diep - Supervisor  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : FIELD H2S BY TUT = 1.91%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00665	0.07826		0.00731
He	0.00004	0.00053		0.00005
N <sub>2</sub>	0.00573	0.06735		0.00654
CO <sub>2</sub>	0.89591	0.00000		0.89108
H <sub>2</sub> S	0.01910	0.00000		0.01520
C <sub>1</sub>	0.05298	0.62323		0.05937
C <sub>2</sub>	0.00696	0.08184	24.7	0.00747
C <sub>3</sub>	0.00594	0.06983	21.8	0.00615
iC <sub>4</sub>	0.00098	0.01158	4.3	0.00100
nC <sub>4</sub>	0.00284	0.03344	12.0	0.00290
iC <sub>5</sub>	0.00075	0.00886	3.7	0.00077
nC <sub>5</sub>	0.00092	0.01085	4.5	0.00094
C <sub>6</sub>	0.00060	0.00716	3.3	0.00060
C <sub>7+</sub>	0.00060	0.00708	3.4	0.00062
TOTAL	1.00000	1.00000	77.6	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>4.51</b>	<b>47.66</b>	<b>4.09</b>	<b>43.24</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
<b>1.451</b>	<b>0.792</b>	<b>730.7</b>	<b>1.778</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7135.55</b>	<b>297.99</b>	<b>4172.10</b>	<b>216.29</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>19100</b>		<b>27.48</b>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>42.03</b>	<b>97.58</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
<b>88.84</b>	<b>0.9941</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeded compare limits: H2S, C1**



05002726B	EE041504024W4DRY	000188788	22ER858920E	22ER86990B
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	DEXPRO DRY OUTLET GAS	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 BATTERY	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00120	0.01424	6.6791
68.9+	C <sub>7</sub> +	Heptanes+	0.00060	0.00708	3.3858
98.6+	C <sub>8</sub> +	Octanes+	0.00018	0.00218	1.1196
125.8+	C <sub>9</sub> +	Nonanes+	0.00000	0.00013	0.0709
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00004	0.0252
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00002	0.0129
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00042	0.00490	2.2662
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00018	0.00206	1.0487
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00000	0.00009	0.0457
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00002	0.0123
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00002	0.0129
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00007	0.00087	0.3595
68.73	C <sub>6</sub>	n-Hexane	0.00025	0.00292	1.3615
71.83	C <sub>6</sub>	Methylcyclopentane	0.00012	0.00140	0.6392
80.06	C <sub>6</sub>	Benzene	0.00006	0.00072	0.2299
80.78	C <sub>6</sub>	Cyclohexane	0.00005	0.00064	0.2871
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00004	0.00047	0.2768
100.94	C <sub>7</sub>	Methylcyclohexane	0.00006	0.00066	0.2989
110.61	C <sub>7</sub>	Toluene	0.00003	0.00033	0.1255
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00000	0.0000
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00000	0.00004	0.0194
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00000	0.0000
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00000	0.0000

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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05003011A      EE041504024W4WETINLET      000189182      22ER858920C      22ER869990A  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      DEXPRO WET INLET GAS      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
 Well Name

CLIVE      NOT APPLICABLE      AGAT RED DEER      BB/BA  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)	Elevation (m)	Pressure (kPa)	Temperature (°C)
From:      To:	KB      GRD	3400      3300 Source      Received	9      23 Source      Received

Mar 07, 2022 10:30      Mar 08, 2022      Mar 11, 2022      Mar 11, 2022      Calgary - Bernie Diep - Supervisor  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : FIELD H2S BY TUT = 1.91%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00666	0.07856		0.00770
He	0.00004	0.00051		0.00005
N <sub>2</sub>	0.00601	0.07084		0.00649
CO <sub>2</sub>	0.89608	0.00000		0.88443
H <sub>2</sub> S	0.01910	0.00000		0.01500
C <sub>1</sub>	0.05229	0.61657		0.06264
C <sub>2</sub>	0.00693	0.08168	24.6	0.00769
C <sub>3</sub>	0.00585	0.06896	21.5	0.00638
iC <sub>4</sub>	0.00097	0.01138	4.2	0.00106
nC <sub>4</sub>	0.00279	0.03290	11.7	0.00311
iC <sub>5</sub>	0.00074	0.00873	3.6	0.00089
nC <sub>5</sub>	0.00090	0.01058	4.3	0.00112
C <sub>6</sub>	0.00059	0.00701	3.2	0.00094
C <sub>7+</sub>	0.00105	0.01229	6.5	0.00250
TOTAL	1.00000	1.00000	79.7	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
4.57	48.50	4.13	43.76
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
1.453	0.810	746.2	1.780
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
7134.97	298.13	4157.79	217.72
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
19100		27.48	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
42.08	110.61
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
76.87	0.9940
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeded compare limits: H2S, C1, C2, C7**



05003011A	EE041504024W4WET1	000189182	22ER858920C	22ER869990A
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	DEXPRO WET INLET GAS	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 BATTERY	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
36.2+	C <sub>6</sub> +	Hexanes+	0.00164	0.01930	9.7338
68.9+	C <sub>7</sub> +	Heptanes+	0.00105	0.01229	6.5187
98.6+	C <sub>8</sub> +	Octanes+	0.00063	0.00730	4.2024
125.8+	C <sub>9</sub> +	Nonanes+	0.00041	0.00469	2.8586
150.9+	C <sub>10</sub> +	Decanes+	0.00024	0.00278	1.7235
174.3+	C <sub>11</sub> +	Undecanes+	0.00002	0.00031	0.2148
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00042	0.00499	2.3163
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00022	0.00261	1.3438
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00017	0.00191	1.1351
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00021	0.00237	1.4633
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00002	0.00031	0.2148
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
49.28	C <sub>5</sub>	Cyclopentane	0.00007	0.00085	0.3497
68.73	C <sub>6</sub>	n-Hexane	0.00024	0.00287	1.3356
71.83	C <sub>6</sub>	Methylcyclopentane	0.00012	0.00138	0.6290
80.06	C <sub>6</sub>	Benzene	0.00006	0.00070	0.2228
80.78	C <sub>6</sub>	Cyclohexane	0.00005	0.00064	0.2868
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00004	0.00049	0.2879
100.94	C <sub>7</sub>	Methylcyclohexane	0.00006	0.00072	0.3265
110.61	C <sub>7</sub>	Toluene	0.00003	0.00039	0.1497
136.16	C <sub>8</sub>	Ethylbenzene	0.00001	0.00008	0.0338
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00001	0.00015	0.0669
144.42	C <sub>8</sub>	o-Xylene	0.00001	0.00009	0.0405
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00003	0.00032	0.1825

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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11005457C      EE041504024W4WETINLET      000189182      22ER850584B      22ER858920C  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      DEXPRO WET INLET GAS      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 BATTERY  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

CLIVE      NOT APPLICABLE      AGAT RED DEER      BA/MJ  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From:      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Feb 09, 2022 10:45      Feb 11, 2022      Feb 18, 2022      Feb 18, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : FIELD H2S BY TUT = 1.40%/LAB = 1.50%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00770	0.07656		0.00714
He	0.00005	0.00052		0.00005
N <sub>2</sub>	0.00649	0.06457		0.02573
CO <sub>2</sub>	0.88443	0.00000		0.87378
H <sub>2</sub> S	0.01500	0.00000		0.01900
C <sub>1</sub>	0.06264	0.62285		0.05418
C <sub>2</sub>	0.00769	0.07650	27.3	0.00714
C <sub>3</sub>	0.00638	0.06345	23.4	0.00590
iC <sub>4</sub>	0.00106	0.01057	4.6	0.00100
nC <sub>4</sub>	0.00311	0.03094	13.1	0.00289
iC <sub>5</sub>	0.00089	0.00883	4.3	0.00077
nC <sub>5</sub>	0.00112	0.01116	5.4	0.00098
C <sub>6</sub>	0.00094	0.00936	5.1	0.00069
C <sub>7+</sub>	0.00250	0.02467	15.3	0.00075
TOTAL	1.00000	1.00000	98.7	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>5.46</b>	<b>50.68</b>	<b>4.93</b>	<b>45.70</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
<b>1.446</b>	<b>0.842</b>	<b>740.1</b>	<b>1.772</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7076.54</b>	<b>296.89</b>	<b>4147.25</b>	<b>221.81</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
	<b>14000</b>		<b>15000</b>
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)
			<b>21.58</b>

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>41.89</b>	<b>108.28</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure		Gas Compressibility	
<b>60.47</b>		<b>0.9938</b>	
C <sub>5+</sub> (kPa)		@ 15 °C & 101.325 kPa	

WDMS Data Verification Check



**Exceeded compare limits: H2S, C1, C7**





11005457C	EE041504024W4WET1	000189182	22ER850584B	22ER858920C
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	DEXPRO WET INLET GAS	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 BATTERY	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
36.2+	C <sub>6+</sub>	Hexanes+	0.00344	0.03404	20.4281
68.9+	C <sub>7+</sub>	Heptanes+	0.00250	0.02467	15.3268
98.6+	C <sub>8+</sub>	Octanes+	0.00159	0.01561	10.2710
125.8+	C <sub>9+</sub>	Nonanes+	0.00074	0.00716	5.0290
150.9+	C <sub>10+</sub>	Decanes+	0.00027	0.00257	1.9363
174.3+	C <sub>11+</sub>	Undecanes+	0.00005	0.00046	0.4022
196.0+	C <sub>12+</sub>	Dodecanes+	0.00000	0.00003	0.0269
216.4+	C <sub>13+</sub>	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14+</sub>	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00091	0.00906	5.0558
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00085	0.00845	5.2420
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00047	0.00459	3.0927
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00021	0.00202	1.4873
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00005	0.00044	0.3753
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00003	0.0269
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m³)
49.28	C <sub>5</sub>	Cyclopentane	0.00010	0.00101	0.4964
68.73	C <sub>6</sub>	n-Hexane	0.00041	0.00408	2.2540
71.83	C <sub>6</sub>	Methylcyclopentane	0.00021	0.00206	1.1137
80.06	C <sub>6</sub>	Benzene	0.00012	0.00117	0.4407
80.78	C <sub>6</sub>	Cyclohexane	0.00011	0.00108	0.5674
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00010	0.00095	0.6624
100.94	C <sub>7</sub>	Methylcyclohexane	0.00017	0.00169	0.9110
110.61	C <sub>7</sub>	Toluene	0.00014	0.00135	0.6088
136.16	C <sub>8</sub>	Ethylbenzene	0.00003	0.00028	0.1443
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00006	0.00057	0.2960
144.42	C <sub>8</sub>	o-Xylene	0.00003	0.00026	0.1307
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00002	0.00022	0.1481

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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04001177E      EE041504024W4DRYOUTLET      000188788      22ER850584C      22ER858920E  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      DEXPRO DRY OUTLET GAS      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 BATTERY  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

CLIVE      NOT APPLICABLE      AGAT RED DEER      BA/MJ  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From:      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Feb 09, 2022 10:55      Feb 11, 2022      Feb 18, 2022      Feb 18, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : FIELD H2S BY TUT = 1.52%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00731	0.07794		0.00700
He	0.00005	0.00054		0.00004
N <sub>2</sub>	0.00654	0.06979		0.01545
CO <sub>2</sub>	0.89108	0.00000		0.88469
H <sub>2</sub> S	0.01520	0.00000		0.01780
C <sub>1</sub>	0.05937	0.63336		0.05397
C <sub>2</sub>	0.00747	0.07965	26.5	0.00711
C <sub>3</sub>	0.00615	0.06562	22.6	0.00605
iC <sub>4</sub>	0.00100	0.01069	4.4	0.00107
nC <sub>4</sub>	0.00290	0.03089	12.2	0.00318
iC <sub>5</sub>	0.00077	0.00822	3.8	0.00089
nC <sub>5</sub>	0.00094	0.01001	4.5	0.00111
C <sub>6</sub>	0.00060	0.00645	3.3	0.00072
C <sub>7+</sub>	0.00062	0.00684	3.7	0.00092
TOTAL	1.00000	1.00000	80.9	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>4.75</b>	<b>46.72</b>	<b>4.30</b>	<b>42.34</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
<b>1.445</b>	<b>0.778</b>	<b>742.7</b>	<b>1.770</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7101.73</b>	<b>296.71</b>	<b>4177.44</b>	<b>213.74</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
	<b>15200</b>		<b>21.87</b>
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>41.85</b>	<b>100.93</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
<b>88.02</b>	<b>0.9941</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeded compare limits: H2S, C1**



04001177E	EE041504024W4DRY	000188788	22ER850584C	22ER858920E
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>AGAT WDMS Number</i>	<i>Previous Number</i>

ENHANCE ENERGY INC	DEXPRO DRY OUTLET GAS	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 BATTERY	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00122	0.01329	6.9439
68.9+	C <sub>7</sub> +	Heptanes+	0.00062	0.00684	3.6737
98.6+	C <sub>8</sub> +	Octanes+	0.00024	0.00271	1.5784
125.8+	C <sub>9</sub> +	Nonanes+	0.00006	0.00095	0.5856
150.9+	C <sub>10</sub> +	Decanes+	0.00004	0.00050	0.3375
174.3+	C <sub>11</sub> +	Undecanes+	0.00001	0.00013	0.1018
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00038	0.00413	2.0953
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00018	0.00177	0.9928
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00002	0.00044	0.2480
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00003	0.00037	0.2358
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00001	0.00013	0.1018
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00007	0.00075	0.3432
68.73	C <sub>6</sub>	n-Hexane	0.00024	0.00260	1.3395
71.83	C <sub>6</sub>	Methylcyclopentane	0.00011	0.00122	0.6147
80.06	C <sub>6</sub>	Benzene	0.00006	0.00065	0.2278
80.78	C <sub>6</sub>	Cyclohexane	0.00005	0.00054	0.2644
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00004	0.00038	0.2451
100.94	C <sub>7</sub>	Methylcyclohexane	0.00005	0.00049	0.2473
110.61	C <sub>7</sub>	Toluene	0.00003	0.00033	0.1388
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00004	0.0207
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00001	0.00013	0.0608
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00005	0.0242
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00001	0.00010	0.0617

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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11000448C      EE041504024W4DRYOUTLET      000188788      21ER836788C      22ER850584C  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      DEXPRO DRY OUTLET GAS      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 BATTERY  
 Well Name      Well License      Well Status      Well Fluid Status      LSD

CLIVE      NOT APPLICABLE      AGAT RED DEER      BA/BB  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From:      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Jan 10, 2022 10:15      Jan 12, 2022      Jan 18, 2022      Jan 18, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : FIELD H2S BY TUT = 1.78%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00700	0.07173		0.00717
He	0.00004	0.00045		0.00004
N <sub>2</sub>	0.01545	0.15836		0.00580
CO <sub>2</sub>	0.88469	0.00000		0.89249
H <sub>2</sub> S	0.01780	0.00000		0.02150
C <sub>1</sub>	0.05397	0.55323		0.05327
C <sub>2</sub>	0.00711	0.07293	25.3	0.00700
C <sub>3</sub>	0.00605	0.06200	22.2	0.00586
iC <sub>4</sub>	0.00107	0.01102	4.7	0.00094
nC <sub>4</sub>	0.00318	0.03261	13.4	0.00280
iC <sub>5</sub>	0.00089	0.00914	4.4	0.00078
nC <sub>5</sub>	0.00111	0.01142	5.4	0.00096
C <sub>6</sub>	0.00072	0.00737	3.9	0.00069
C <sub>7+</sub>	0.00092	0.00975	5.6	0.00070
TOTAL	1.00000	1.00000	84.8	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>4.74</b>	<b>44.18</b>	<b>4.29</b>	<b>40.09</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
<b>1.446</b>	<b>0.829</b>	<b>729.0</b>	<b>1.772</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7084.17</b>	<b>296.19</b>	<b>4079.18</b>	<b>210.05</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>17800</b>		<b>25.61</b>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>41.88</b>	<b>101.09</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
<b>83.69</b>	<b>0.9940</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check 

**Exceeded compare limits: H2S, C1**



11000448C	EE041504024W4DRY	000188788	21ER836788C	22ER850584C
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>AGAT WDMS Number</i>	<i>Previous Number</i>

ENHANCE ENERGY INC	DEXPRO DRY OUTLET GAS	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 BATTERY	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00164	0.01711	9.4496
68.9+	C <sub>7</sub> +	Heptanes+	0.00092	0.00975	5.5637
98.6+	C <sub>8</sub> +	Octanes+	0.00038	0.00418	2.5631
125.8+	C <sub>9</sub> +	Nonanes+	0.00006	0.00079	0.5186
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00010	0.0704
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00000	0.0018
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00054	0.00557	3.0006
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00032	0.00339	2.0445
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00006	0.00069	0.4482
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00010	0.0686
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00000	0.0018
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00009	0.00090	0.4288
68.73	C <sub>6</sub>	n-Hexane	0.00029	0.00301	1.6121
71.83	C <sub>6</sub>	Methylcyclopentane	0.00014	0.00145	0.7601
80.06	C <sub>6</sub>	Benzene	0.00007	0.00071	0.2603
80.78	C <sub>6</sub>	Cyclohexane	0.00007	0.00068	0.3482
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00005	0.00056	0.3762
100.94	C <sub>7</sub>	Methylcyclohexane	0.00008	0.00081	0.4220
110.61	C <sub>7</sub>	Toluene	0.00004	0.00044	0.1934
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00005	0.0247
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00001	0.00010	0.0484
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00003	0.0159
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00001	0.0063

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

**View or download your data online at [webfluids.agatlabs.com](http://webfluids.agatlabs.com)**



11005224B      EE041504024W4WETINLET      000189182      21ER836788B      22ER850584B  
 Container Identification      Sample Point Code      Meter Code      AGAT WDMS Number      Previous Number      Laboratory Number

ENHANCE ENERGY INC      DEXPRO WET INLET GAS      04-15-040-24W4  
 Operator Name      Sampling Point      Unique Well Identifier

ENHANCE CLIVE 4-15 BATTERY      Well License      Well Status      Well Fluid Status      LSD  
 Well Name

CLIVE      NOT APPLICABLE      AGAT RED DEER      BA/BB  
 Field or Area      Pool or Zone      Sampler's Company      Name of Sampler

Test Interval (mKB)      Elevation (m)      Pressure (kPa)      Temperature (°C)  
 From:      To:      Test Type      Test No.      KB      GRD      Source      Received      Source      Received

Jan 10, 2022 10:05      Jan 12, 2022      Jan 18, 2022      Jan 18, 2022      Calgary - Gerry Ecker - Reporter  
 Date/Time Sampled      Date Received      Date Analyzed      Date Reported      Location - Approved By - Title

Other Information : FIELD H2S BY TUT = 1.90%

### COMPOSITION

Component	Mole Fraction		Liquid Volume mL / m <sup>3</sup>	Mole Fraction of Previous Analysis
	Air Free As Received	Air & Acid Gas Free As Received		
H <sub>2</sub>	0.00714	0.06654		0.00848
He	0.00005	0.00047		0.00005
N <sub>2</sub>	0.02573	0.23986		0.00658
CO <sub>2</sub>	0.87378	0.00000		0.88238
H <sub>2</sub> S	0.01900	0.00000		0.02280
C <sub>1</sub>	0.05418	0.50517		0.05973
C <sub>2</sub>	0.00714	0.06659	25.4	0.00710
C <sub>3</sub>	0.00590	0.05497	21.7	0.00606
iC <sub>4</sub>	0.00100	0.00929	4.4	0.00100
nC <sub>4</sub>	0.00289	0.02690	12.1	0.00297
iC <sub>5</sub>	0.00077	0.00717	3.8	0.00077
nC <sub>5</sub>	0.00098	0.00915	4.7	0.00098
C <sub>6</sub>	0.00069	0.00640	3.7	0.00044
C <sub>7+</sub>	0.00075	0.00748	4.6	0.00066
TOTAL	1.00000	1.00000	80.4	1.00000

### PROPERTIES

Calculated Heating Value @15 °C & 101.325 kPa (MJ/m <sup>3</sup> )			
Gross		Net	
<b>4.64</b>	<b>39.00</b>	<b>4.21</b>	<b>35.40</b>
Air Free as Received	Moisture & Acid Gas Free	Air Free as Received	Moisture & Acid Gas Free

Calculated Density			
Relative		Absolute	
<b>1.439</b>	<b>0.827</b>	<b>730.6</b>	<b>1.763</b>
Moisture Free As Received	Moisture & Acid Gas Free	C <sub>7+</sub> Density (kg/m <sup>3</sup> )	Total Sample Density (kg/m <sup>3</sup> )

Calculated Pseudo Critical Properties			
As Sampled		Acid Gas Free	
<b>7047.35</b>	<b>294.24</b>	<b>4016.10</b>	<b>199.61</b>
pPc (kPa)	pTc (K)	pPc (kPa)	pTc (K)

Hydrogen Sulfide (H <sub>2</sub> S) (ppm)			
Field Value		Laboratory Value	
<b>19000</b>		<b>27.33</b>	
Stain Tube (GPA 2377)	Tutweiler (GPA C1)	Other	GC-SCD (ASTM D5504)

Calculated Molecular Weight (Moisture Free asReceived) (g/mol)	
<b>41.67</b>	<b>99.83</b>
Total Sample	C <sub>7+</sub> Fraction

Calculated Vapour Pressure	Gas Compressibility
<b>83.66</b>	<b>0.9941</b>
C <sub>5+</sub> (kPa)	@ 15 °C & 101.325 kPa

WDMS Data Verification Check



**Exceeded compare limits: H2S, C1**



11005224B	EE041504024W4WET1	000189182	21ER836788B	22ER850584B
<i>Container Identification</i>	<i>Sample Point Code</i>	<i>Meter Code</i>	<i>Previous Number</i>	<i>Laboratory Number</i>

ENHANCE ENERGY INC	DEXPRO WET INLET GAS	04-15-040-24W4
<i>Operator Name</i>	<i>Sampling Point</i>	<i>Unique Well Identifier</i>

ENHANCE CLIVE 4-15 BATTERY	<i>Well License</i>	<i>Well Status</i>	<i>Well Fluid Status</i>	<i>LSD</i>
<i>Well Name</i>				

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Summary	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
36.2+	C <sub>6</sub> +	Hexanes+	0.00144	0.01388	8.3393
68.9+	C <sub>7</sub> +	Heptanes+	0.00075	0.00748	4.6223
98.6+	C <sub>8</sub> +	Octanes+	0.00026	0.00282	1.8853
125.8+	C <sub>9</sub> +	Nonanes+	0.00003	0.00052	0.3755
150.9+	C <sub>10</sub> +	Decanes+	0.00000	0.00010	0.0794
174.3+	C <sub>11</sub> +	Undecanes+	0.00000	0.00001	0.0063
196.0+	C <sub>12</sub> +	Dodecanes+	0.00000	0.00000	0.0000
216.4+	C <sub>13</sub> +	Tridecanes+	0.00000	0.00000	0.0000
235.6 - 270.7	C <sub>14</sub> +	Tetradecanes+	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Hydrocarbon Grouping	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
68.9 - 98.6	C <sub>7</sub>	Heptanes	0.00049	0.00466	2.7370
98.6 - 125.8	C <sub>8</sub>	Octanes	0.00023	0.00230	1.5098
125.8 - 150.9	C <sub>9</sub>	Nonanes	0.00003	0.00042	0.2960
150.9 - 174.3	C <sub>10</sub>	Decanes	0.00000	0.00010	0.0732
174.3 - 196.0	C <sub>11</sub>	Undecanes	0.00000	0.00001	0.0063
196.0 - 216.4	C <sub>12</sub>	Dodecanes	0.00000	0.00000	0.0000
216.4 - 235.6	C <sub>13</sub>	Tridecanes	0.00000	0.00000	0.0000
235.6 - 253.6	C <sub>14</sub>	Tetradecanes	0.00000	0.00000	0.0000
253.6 - 270.69	C <sub>15</sub>	Pentadecanes	0.00000	0.00000	0.0000

BOILING POINT RANGE (°C)	Carbon Number	Relevant Compounds	As Received Mole Fraction	Acid Gas Free Mole Fraction	As Received Liquid Volume (mL/m <sup>3</sup> )
49.28	C <sub>5</sub>	Cyclopentane	0.00008	0.00075	0.3939
68.73	C <sub>6</sub>	n-Hexane	0.00029	0.00266	1.5647
71.83	C <sub>6</sub>	Methylcyclopentane	0.00014	0.00128	0.7389
80.06	C <sub>6</sub>	Benzene	0.00007	0.00065	0.2622
80.78	C <sub>6</sub>	Cyclohexane	0.00006	0.00060	0.3392
99.24	C <sub>8</sub>	2,2,4-Trimethylpentane	0.00005	0.00045	0.3335
100.94	C <sub>7</sub>	Methylcyclohexane	0.00006	0.00060	0.3481
110.61	C <sub>7</sub>	Toluene	0.00003	0.00033	0.1561
136.16	C <sub>8</sub>	Ethylbenzene	0.00000	0.00002	0.0138
138.33 ; 139.09	C <sub>8</sub>	m&p-Xylene	0.00001	0.00007	0.0399
144.42	C <sub>8</sub>	o-Xylene	0.00000	0.00003	0.0146
169.34	C <sub>9</sub>	1,2,4-Trimethylbenzene	0.00000	0.00001	0.0091

Results relate to only items tested. Analysis and associated calculations are based on GPA 2261, GPA 2286, GPA 2145, AGA #5, and TP-17.

Sampling performed by AGAT Laboratories is done according to Field Sampling Procedure Manual

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APPENDIX C- ACTL Project Vendors

Submitted on March 31,  
2023



*ACTL Pipelining and Injection Well Drilling at Clive*





<b>Plant #1 Tie-In</b>		
<b>Equipment/Service</b>	<b>Vendor</b>	<b>Location</b>
<b>Blower Skid (Separator, Blower, Motor, Water Pump)</b>	Enerflex	Alberta
<b>Engineering</b>	Rally Engineering	Alberta
<b>Engineering</b>	Rangeland Engineering	Alberta
<b>Engineering</b>	Spark Power (ORBIS)	Alberta
<b>Construction-Mechanical</b>	Pillar Resource Services	Alberta
<b>Construction-Electrical -Instrumentation</b>	Pronghorn Controls	Alberta
<b>Construction-Electrical -Instrumentation</b>	Chemco	Alberta
<b>Blower Building</b>	PTW Structures	Alberta
<b>Piping, valves, fittings</b>	APEX	Alberta
<b>Temporary Motor</b>	PMW	Oklahoma, USA
<b>Crane</b>	Kristian Electric	Alberta
<b>Instruments, valves, controls, Electrical components</b>	Spartan Controls	Alberta
<b>Instruments, valves, controls, Electrical components</b>	Dezurik	Alberta
<b>Instruments, valves, controls, Electrical components</b>	WIKA	Alberta
<b>Instruments, valves, controls, Electrical components</b>	Tundra Process	Alberta
<b>Instruments, valves, controls, Electrical components</b>	WESCO	Alberta
<b>Instruments, valves, controls, Electrical components</b>	Powell	Alberta
<b>Instruments, valves, controls, Electrical components</b>	Westburne	Alberta
<b>Instruments, valves, controls, Electrical components</b>	Siemens	Alberta

<b>RCRU Procurement</b>		
<b>Equipment/Service</b>	<b>Vendor</b>	<b>Location</b>
<b>Inlet Separator</b>	Bilton Welding	Alberta
<b>Inlet Piping</b>	Comco	Alberta
<b>Pipe, Valves, Fittings</b>	Comco & Pinnacle	Alberta
<b>Dehydration Skid</b>	Spectrum	Alberta
<b>Air Cooled Exchangers</b>	Exchanger Industries	Alberta
<b>Glycol Pump</b>	Smith Cameron Pump	Alberta
<b>Refrigeration Skid</b>	Startec	Alberta
<b>CO<sub>2</sub> Transfer Pump</b>	National Process Equipment	Alberta
<b>Engineering</b>	Gas to Liquids Engineering (GLE)	Alberta
<b>Engineering - Ammonia Refrigeration</b>	Strong Refrigeration Consultants	Saskatchewan
<b>Engineering - 36" Carrier Pipe Structural</b>	Panzer Engineering	Alberta
<b>Environmental Planning</b>	Wapta Environmental	Alberta
<b>Regulatory</b>	Wapta/GLE	Alberta
<b>Land</b>	AIM Land Services	Alberta
<b>Inlet Condenser</b>	Alfa Laval	Ontario
<b>CO<sub>2</sub> Booster Pump</b>	Clyde Union Canada	Ontario

<b>Compressor</b>	Siemens	Germany
<b>Instrument Air Compressor</b>	Northwest Equipment	Alberta
<b>Engineering</b>	Gas Liquids Engineering (GLE)	Alberta
<b>Electrical Engineering and Controls</b>	Beta Tech Inc.	Alberta
<b>Survey</b>	Global Raymac	Alberta
<b>Earthworks</b>	Noyen Construction	Alberta
<b>Pilings</b>	Valard	Alberta
<b>Concrete Foundation</b>	PME	Alberta
<b>Compressor Building</b>	Brytex Building Systems	Alberta
<b>Mechanical Construction</b>	TAHK Projects	Alberta
<b>Electrical Construction</b>	Techmation Electric & Controls	Alberta
<b>SCS</b>		
<b>Equipment/Service</b>	<b>Vendor</b>	<b>Location</b>
<b>Compressor</b>	Siemens	Germany
<b>Lube Oil Cooler</b>	Calhex Industries	Alberta
<b>Compressor Interstage Coolers</b>	Chart Cooler Service Company	Tulsa, OK
<b>Compressor Nozzle Check Valves</b>	CG Industrial Specialties	British Columbia
<b>Engineering</b>	Gas Liquids Engineering (GLE)	Alberta
<b>Environmental Planning</b>	Wapta Environmental	Alberta
<b>Regulatory</b>	Wapta/GLE	Alberta
<b>Land</b>	AIM Land Services	Alberta
<b>Instrument Air Compressor</b>	Northwest Equipment	Alberta
<b>Electrical Engineering and Controls</b>	Beta Tech Inc.	Alberta
<b>Survey</b>	Global Raymac	Alberta
<b>Earthworks</b>	Noyen Construction	Alberta
<b>Pilings</b>	Valard	Alberta
<b>Concrete Foundation</b>	PME	Alberta
<b>Compressor Building</b>	Brytex Building Systems	Alberta
<b>Mechanical Construction</b>	Train Oilfield Services	Alberta
<b>Electrical Construction</b>	Techmation Electric & Controls	Alberta
<b>PIPELINE</b>		
<b>Equipment/Service</b>	<b>Vendor</b>	<b>Location</b>
<b>Engineering</b>	Buccaneer Engineering	Alberta
<b>Environmental Assessment</b>	Wapta Environmental	Alberta
<b>Environmental Planning</b>	Wapta Environmental	Alberta
<b>Regulatory</b>	Internal	Alberta
<b>Valves</b>	KTI Limited	Ontario
<b>Valves</b>	Apex Distribution	Alberta
<b>Survey</b>	Meridian Survey & Altus Group	Alberta
<b>Geotechnical Assessment</b>	Higher Ground Consulting	Alberta
<b>Land Acquisition</b>	AIM Land Services	Alberta

<b>Pipe</b>	Evraz North America	Alberta
<b>Pipe Bends</b>	Alberta Custom Pipe Bending	Alberta
<b>Coating</b>	ShawCor Ltd.	Alberta
<b>Mainline Contractors – Spread 1</b>	Viking Projects Ltd.	Alberta
<b>Mainline Contractors - Spread 2</b>	M&N Energy Services Ltd.	Alberta
<b>Mainline Contractors - Spread 3</b>	Canadian Plains Energy Services LP	Saskatchewan
<b>Mainline Contractors - Spread 4</b>	League Projects Ltd.	Alberta

<b>MMV Program</b>		
<b>Equipment/Service</b>	<b>Vendor</b>	<b>Location</b>
<b>Hydrosphere and Biosphere Monitoring Program Design, Field Work and Interpretation</b>	Integrated Sustainability	Alberta
<b>Downhole Pressure Surveys</b>	Reliance Oilfield Service	Alberta
<b>Sulphur isotope</b>	University of Calgary	Alberta
<b>Detailed Water Analysis</b>	University of Calgary	Alberta
<b>Line Locates</b>	Central Line Locating	Alberta
<b>Production Testers</b>	Accuracy Online Production Testing	Alberta
<b>Hot Oiler</b>	Larry's hot oil service	Alberta
<b>Safety</b>	Transcend Safety	Alberta
<b>Well Swabbing</b>	Viking Wireline Services	Alberta
<b>Fluid Sampling and Chemical Analyses</b>	AGAT	Alberta
<b>Stable Carbon Isotope Analyses</b>	University of Alberta	Alberta
<b>Carbon 14 Analyses</b>	A.E. Lalonde AMS Laboratory	Ontario
<b>Groundwater Observation Well Driller</b>	Cliff's Drilling Ltd.	Alberta
<b>Program Design and Project Management</b>	Tir Nua Consulting Ltd./Enhance	Alberta
<b>Fully Coupled Thermo-Poro-Mechanical Modelling</b>	InnoTech Alberta	Alberta
<b>Review of Rock Properties and Analytical Study of Stress Changes</b>	David Hassan, P.Eng.	Alberta
<b>Pressure Transient Analysis</b>	SAGA Wisdom	Alberta

<b>Clive Pipelines</b>		
<b>Equipment/Service</b>	<b>Vendor</b>	<b>Location</b>
<b>Engineering</b>	Gas Liquids Engineering (GLE)	Alberta
<b>Survey</b>	Compass Geomatics	Alberta
<b>Land</b>	Land Solutions	Alberta
<b>Mechanical Construction</b>	Viking Projects	Alberta
<b>Linepipe</b>	Gateway Tubulars	Alberta

<b>HDPE Pipe Liner</b>	Allied Pipe Technologies	Alberta
<b>Pipe, Valves, Fittings</b>	Apex Distribution	Alberta
<b>Injection Skids</b>	Viking Projects	Alberta
<b>Injection Control System</b>	Phoenix Energy Services	Alberta
<b>Electrical Construction</b>	TNT Electric and Controls	Alberta

<b>Clive 04-15 Facility</b>		
<b>Equipment/Service</b>	<b>Vendor</b>	<b>Location</b>
<b>Engineering</b>	Gas Liquids Engineering (GLE)	Alberta
<b>Battery Recycle Compressor</b>	Compass Compression	Alberta
<b>Inlet Separator</b>	Spectrum Process Systems	Alberta
<b>Blowdown Heater</b>	Cado Industries	Alberta
<b>Flare Stack</b>	FlareTech	Alberta
<b>Control Valves</b>	Spartan Controls	Alberta
<b>CO<sub>2</sub> Valves</b>	Apex Distribution	Alberta
<b>Emulsion Valves</b>	Truenorth Modifications	Alberta
<b>Pipe and Fittings</b>	Xceed Oilfield Supply	Alberta
<b>Pilings</b>	Subsurface Construction	Alberta
<b>Mechanical Construction</b>	Viking Projects	Alberta
<b>E-Houses</b>	Trecon-Prologic	Alberta
<b>Electrical Construction</b>	Iconic Electric and Controls	Alberta
<b>Control System</b>	Trecon-Prologic	Alberta

<b>Clive EOR Drilling Operations</b>		
<b>Vendor</b>	<b>Service</b>	<b>Location</b>
<b>775645 AB LTD.</b>	Equipment Rentals	Alberta
<b>EXCALIBUR DRILLING LTD.</b>	Drilling Contractor	Alberta
<b>CENTRAL LABS LTD.</b>	Cuttings and fluid analysis	Alberta
<b>PROVIDENCE TRUCKING INC.</b>	Trucking	Alberta
<b>KIK TRANSPORT LTD.</b>	Equipment Rentals	Alberta
<b>TERVITA CORPORATION</b>	Drilling Fluid Disposal	Alberta
<b>SHOCK TRAUMA AIR RESCUE SERVICE</b>	Safety	Alberta
<b>APEX INSPECTION SERVICES INC.</b>	Supervision	Alberta
<b>ACE PRESSURE TESTING AND SERVICES LTD.</b>	BOP Pressure Testing	Alberta
<b>MIDWEST PROPANE LTD.</b>	Propane	Alberta
<b>SECURE ENERGY (DRILLING SERVICES) INC.</b>	Drilling Fluids	Alberta
<b>HELLBOUND SERVICES CORP.</b>	Potable Water	Alberta
<b>WESTERN WATER DISPOSAL</b>	Waste disposal	Alberta
<b>BRICAR CONTRACTING LTD.</b>	Lease Construction	Alberta

<b>TRYTON TOOL SERVICES</b>	Downhole Tools	Alberta
<b>PROGEO CONSULTANTS</b>	Geology Wellsite Supervision	Alberta
<b>ACR OILFIELD SERVICES LTD.</b>	Sewage	Alberta
<b>TROJAN SAFETY SERVICES LTD.</b>	Safety	Alberta
<b>CALNASH TRUCKING (SOUTH) LTD.</b>	Rig mob/Demob	Alberta
<b>PORTER DEVELOPMENTS LTD.</b>	Equipment Rentals	Alberta
<b>NOV CANADA ULC</b>	Drilling Data/Communications	Alberta
<b>DRILLING TOOLS INTERNATIONAL CORP</b>	Drilling Tools	Alberta
<b>DYNAMITE OILFIELD SERVICES INC.</b>	Trucking	Alberta
<b>BRAWLER HEAVY HAUL LTD.</b>	Trucking	Alberta
<b>PRO ENERGY INC.</b>	Equipment Rentals	Alberta
<b>1523773 ALBERTA LTD.</b>	Supervision	Alberta
<b>SILVERPOINT ENERGY SERVICES INC.</b>	Water/Vacuum Truck/ Environmental Supervisor	Alberta
<b>RM ENGINEERING</b>	Supervision	Alberta
<b>VISKAT TUBULAR TECHNOLOGIES INC.</b>	Power Tongs	Alberta
<b>BENCHMARK DATA SOLUTIONS</b>	Communications	Alberta
<b>LOCKED &amp; LOADED HOTSHOT SERVICES</b>	Trucking	Alberta
<b>IMPORT TOOL CORPORATION LTD.</b>	Casing Accessories	Alberta
<b>TYKAN SYSTEMS LTD.</b>	Trucking	Alberta
<b>LARSON CONTRACTING LTD.</b>	Lease Construction	Alberta
<b>KETEK GROUP INC.</b>	Equipment Rentals	Alberta
<b>GMACK OILFIELD SERVICES LTD.</b>	Trucking	Alberta
<b>CAMPBELL OILFIELD RENTALS LTD.</b>	Solids Control	Alberta
<b>STREAM-FLO INDUSTRIES LTD.</b>	Wellhead	Alberta
<b>CANADIAN CASING ACCESSORIES INC.</b>	Casing Accessories	Alberta
<b>CONTINENTAL LABORATORIES LTD.</b>	Equipment Rentals	Alberta
<b>M&amp;R SAFETY LTD.</b>	Equipment and Operator	Alberta
<b>DRV TRANSPORT &amp; RENTALS INC.</b>	Equipment Rentals	Alberta
<b>TRICAN WELL SERVICE LTD.</b>	Casing Cementing	Alberta
<b>WINALTA TRANSPORT</b>	Trucking	Alberta
<b>TIGGERS MOBILE WELDING</b>	Welding	Alberta
<b>NAVITAS TUBULARS</b>	Casing	Alberta
<b>DIABLO TOOLS INC.</b>	Drill Bit	Alberta
<b>INDENT OILFIELD TRUCKING LTD.</b>	Trucking	Alberta
<b>BJL CONTRACTING LTD.</b>	Snow Plowing	Alberta
<b>CENTRAL LINE LOCATING INC.</b>	Lease construction	Alberta
<b>ENSIGN ENERGY DRILLING SERVICES LTD.</b>	Directional Tools and MPD Equipment	Alberta

<b>Clive EOR Completion Operations</b>		
<b>Vendor</b>	<b>Service</b>	<b>Location</b>
<b>TWISTED HOTSHOT INC.</b>	Trucking	Alberta
<b>PRAIRIE MUD SERVICE</b>	Inhibited Fluid	Alberta
<b>TRANSCEND SAFETY SERVICES LTD.</b>	Safety	Alberta
<b>MEDICINE RIVER OIL RECYCLERS LTD.</b>	Disposal	Alberta
<b>NAVITAS TUBULARS</b>	Tubular	Alberta
<b>AERO RENTAL SERVICES</b>	Equipment Rental	Alberta
<b>TRYTON TOOL SERVICES</b>	Downhole tools	Alberta
<b>CWC WELL SERVICES</b>	Service Rig	Alberta
<b>STREAM-FLO INDUSTRIES LTD.</b>	Wellhead	Alberta
<b>VP CONSULTING SERVICES LTD.</b>	Supervision	Alberta
<b>TRICAN WELL SERVICE LTD.</b>	Pumper	Alberta
<b>EVERGREEN ENERGY TANK RENTALS LTD.</b>	Rentals	Alberta
<b>PROVIDENCE TRUCKING INC.</b>	Trucking	Alberta
<b>MILLENNIUM HEAT</b>	Steamer	Alberta
<b>HALLIBURTON GROUP CANADA</b>	Downhole Tools	Alberta
<b>FLUID EXPERTS LTD.</b>	Fluid Hauling	Alberta
<b>RELIANCE OFS CANADA LTD.</b>	Wireline and logging	Alberta
<b>HARBER COATINGS INC.</b>	Tubular Coating	Alberta
<b>ALTUS INTERVENTION CANADA INC.</b>	Wireline	Alberta
<b>LARRY'S HOT OIL SERVICE</b>	Pressure Truck	Alberta

<b>Clive Wellbore Integrity and Abandonment Operations</b>		
<b>Vendor</b>	<b>Service</b>	<b>Location</b>
<b>TRANSCEND SAFETY SERVICES LTD.</b>	Safety	Alberta
<b>LARRY'S HOT OIL SERVICE</b>	Truck Fluids	Alberta
<b>MAGNUM CEMENTING SERVICES OPERATIONS LTD. LLC</b>	Cement	Alberta
<b>CWC WELL SERVICES</b>	Service Rig	Alberta
<b>MILLENNIUM HEAT</b>	Steamer	Alberta
<b>PROVIDENCE TRUCKING INC.</b>	Trucking	Alberta
<b>TERVITA CORPORATION</b>	Disposal	Alberta
<b>MEDICINE RIVER OIL RECYCLERS LTD.</b>	Disposal	Alberta
<b>TRYTON TOOL SERVICES</b>	Downhole Tools	Alberta
<b>FLUID EXPERTS LTD.</b>	Fluids and Trucking	Alberta
<b>VP CONSULTING SERVICES LTD.</b>	Supervision	Alberta
<b>AERO RENTAL SERVICES</b>	Equipment Rentals	Alberta
<b>RELIANCE OFS CANADA LTD.</b>	Logging	Alberta
<b>EVERGREEN ENERGY TANK RENTALS LTD.</b>	Equipment Rentals	Alberta

<b>ACCURACY ONLINE PRODUCTION TESTING CORP.</b>	P-Tank/Flare	Alberta
<b>TWISTED HOTSHOT INC.</b>	Trucking	Alberta

<b>Clive Operations and Maintenance</b>		
<b>Equipment/Service</b>	<b>Vendor</b>	<b>Location</b>
<b>Automation and Controls</b>	Focal Automation	Alberta
<b>E&amp;I Services</b>	TNT Electric and Controls	Alberta
<b>Mechanical Services</b>	Kromm Transport	Alberta
<b>Mechanical Services</b>	Train Oilfield	Alberta
<b>Mechanical Services</b>	Iron Cross Oilfield	Alberta
<b>Regulatory Consulting</b>	Highwood Emissions	Alberta
<b>Pipeline Integrity</b>	Source Corrosion	Alberta
<b>Pipeline Integrity</b>	HuDu	Alberta
<b>Safety Services</b>	Transcend Safety	Alberta
<b>Chemicals</b>	Baker Hughes	Alberta
<b>Chemicals</b>	Univar Canada	Alberta
<b>Lubricants</b>	Conabar Chemical Consulting	Alberta
<b>Pipe, Valves, Fittings</b>	APEX Distributing	Alberta