

Listed below are the volume calculations that were determined for this flare event:

	Information	Volumes	Methodology
A.	Flare Volume:	183	Gas Volume Field Personnel Reported
B.	CO2 Percentage:	88.17%	Gas Analysis - Feb 2025
C.	Hydrocarbon Percentage:	11.83%	Gas Analysis - Feb 2025
D.	Hydrocarbon Volume:	22	$(1 - \text{co2 mol\%}) / 100 * \text{total volume}$
E.	CO2 Volume:	161	$(\text{co2 mol\%}) / 100 * \text{total volume}$

**PANTECHS**
LABORATORIES**TRUE**assay
A Pantechs TRUE Service

ANALYTICALreport

2/28/2025

Customer:	Occidental Permian Ltd.
Location:	South Hobbs Unit 31920
Order:	4172-8441
Received:	2/20/2025
Primary Contact:	Richard Sanders
Description:	Compressor Suction and Discharge Samples at South Hobbs Battery

REPORT DISTRIBUTION:

Richard Sanders

All data reported in this Report is in compliance with the test method(s) performed as of the date noted above. The validity and integrity of this report will remain intact as long as it is accompanied by this page and reproduced in full. Any datafile (e.g. txt, csv, etc.) produced which is associated with the results in this report shall be considered for convenience only and does not supersede this report as the official test results. We reserve the right to return to you any unused samples received if we consider so necessary (e.g. samples identified as hazardous waste).

We appreciate you choosing Pantechs Laboratories. If you have any questions concerning this report, please feel free to contact us at any time.

Pantechs Laboratories, Inc. - Order: 4172-8441 - 2/20/2025 - South Hobbs Unit - Compressor Suction and Discharge Samples at South Hobbs Battery

COLLECTION LIST- 2

FLUID	OPERATOR	LOCATION	SITE	SAMPLE POINT	DATE	TIME
Gas	Occidental Permian Ltd.	South Hobbs Unit	Central Tank Battery	Compressor Discharge	2/20/2025	11:28 AM
Gas	Occidental Permian Ltd.	South Hobbs Unit	Central Tank Battery	Compressor Suction	2/20/2025	11:27 AM

PLANNED COLLECTION NOT PERFORMED - 1

OPERATOR	LOCATION	SITE	SAMPLE POINT	COMMENT
Occidental Permian Ltd.	South Hobbs Unit	Central Tank Battery	Compressor Discharge	Sample Point All Water

Pantechs Laboratories, Inc. - Order: 4172-8441 - 2/20/2025 - South Hobbs Unit - Compressor Suction and Discharge Samples at South Hobbs Battery



ANALYSIScertificate

OPERATOR	Occidental Permian Ltd.	PRESSURE	N/A
LOCATION	South Hobbs Unit 31920	SAMPLE/ATM TEMP	N/A / N/A
SITE	Central Tank Battery	COLLECTION DATE/TIME	02/20/2025 11:28 AM
SAMPLE POINT	Compressor Discharge	COLLECTION BY	Cody Carson
METER ID		SPOT/COMPOSITE	Spot
CONTAINER(S)		PRESSURE/TEMP BASE	14.650 psi/60 F

2/20/2025 - Too wet to sample

COLLECTION NOT PERFORMED

Employee	Comment
Cody Carson	Sample Point All Water

Pantechs Laboratories, Inc. - Order: 4172-8441 - 2/20/2025 - South Hobbs Unit - Compressor Suction and Discharge Samples at South Hobbs Battery



ANALYSIS certificate

OPERATOR	Occidental Permian Ltd.	PRESSURE	30 psig
LOCATION	South Hobbs Unit 31920	SAMPLE/ATM TEMP	40 F / 27 F
SITE	Central Tank Battery	COLLECTION DATE/TIME	02/20/2025 11:27 AM
SAMPLE POINT	Compressor Suction	COLLECTION BY	Cody Carson
METER ID		SPOT/COMPOSITE	Spot
CONTAINER(S)	PL3019	PRESSURE/TEMP BASE	14.650 psi/60 F

ONSITE TESTING - STAIN TUBE

METHOD	COMPOUND	MOL%	GRAINS/100 SCF	PPMV	LB/MMSCF
GPA2377	hydrogen sulfide	1.3649	866.73	13,781.0	650.0

FRACTIONAL: GPA 2261-20

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	0.0925	0.0569	
CARBON DIOXIDE	CO2	88.1706	85.1966	14.857
HYDROGEN SULFIDE	H2S	1.3649	1.0213	0.182
METHANE	C1	0.5453	0.1921	0.091
ETHANE	C2	0.4164	0.2749	0.110
PROPANE	C3	2.1872	2.1176	0.595
I-BUTANE	iC4	0.9443	1.2050	0.305
N-BUTANE	nC4	2.5548	3.2603	0.801
I-PENTANE	iC5	1.0977	1.7389	0.396
N-PENTANE	nC5	0.8704	1.3788	0.312
HEXANES PLUS	C6+	1.7559	3.5576	0.721
TOTALS:		100.0000	100.0000	18.370

Value of "0.0000" in fractional interpreted as below detectable limit.

LIQUID YIELD (GAL/MSCF)

ETHANE+	PROPANE+	BUTANES+	PENTANES+	26 PSI RVP	10 PSI RVP
3.240	3.130	2.535	1.429		

CALCULATED PROPERTIES: GPA 2172/ASTM D3588

PROPERTY	BTU/CF GROSS	BTU/CF NET	SPECIFIC GR.	Z FACTOR	MOL WEIGHT	WOBBE INDX
DRY	358.90	331.49	1.583	0.993	45.546	285.25
H2O SAT	353.86	326.01	1.546	0.992	44.750	284.59

ANALYSIS METHODS AND DESCRIPTION

ITEM	METHOD	FLUID	DESCRIPTION
NGC6+	GPA 2261-20	Gas	Analysis for Natural Gas and Similar Gaseous Mixtures by Gas Chromatography through C6+
OSST	GPA 2377	Gas	Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes

SAMPLING METHODS AND DESCRIPTION

FLUID	METHOD	DESCRIPTION
GAS	GPA 2166-22	Obtaining Natural Gas Samples for Analysis by Gas Chromatography
LIQUID	GPA 2174-20	Obtaining Liquid Hydrocarbons Samples For Analysis by Gas Chromatography

CALCULATION METHODS AND DESCRIPTION

METHOD	DESCRIPTION
GPA 2145-16	Table of Physical Properties for Hydrocarbons and Other Compounds of Interest to the Natural Gas and Natural Gas Liquids Industries
GPA 2172-19	Calculation of Gross Heating Value, Relative Density, Compressibility and Theoretical Hydrocarbon Liquid Content for Natural Gas Mixtures for Custody Transfer
ASTM 3588	Standard Practice for Calculating Heat Value, Compressibility Factor, and Relative Density of Gaseous Fuels

THIS PAGE IS INTENTIONALLY LEFT BLANK

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS

Action 445609

QUESTIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 445609
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Prerequisites	
Incident ID (n#)	nAPP2507943592
Incident Name	NAPP2507943592 SOUTH HOBBS CTB @ 0
Incident Type	Flare
Incident Status	Initial C-141 Received
Incident Facility	[fJXK1520829861] South Hobbs Unit CTB

Location of Release Source	
Please answer all the questions in this group.	
Site Name	South Hobbs CTB
Date Release Discovered	02/21/2024
Surface Owner	Private

Incident Details	
Please answer all the questions in this group.	
Incident Type	Flare
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

Nature and Volume of Release	
Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	No
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Equipment Failure Gas Compressor Station Natural Gas Flared Released: 14 MCF Recovered: 0 MCF Lost: 14 MCF.
Other Released Details	Cause: Equipment Failure Gas Compressor Station Carbon Dioxide Released: 169 MCF Recovered: 0 MCF Lost: 169 MCF.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	Not answered.

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 2

Action 445609

QUESTIONS (continued)

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 445609
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Nature and Volume of Release (continued)	
Is this a gas only submission (i.e. only significant Mcf values reported)	Yes, according to supplied volumes this appears to be a "gas only" report.
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	No
Reasons why this would be considered a submission for a notification of a major release	Unavailable.
With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.	

Initial Response

The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.

The source of the release has been stopped	True
The impacted area has been secured to protect human health and the environment	True
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	True
All free liquids and recoverable materials have been removed and managed appropriately	True
If all the actions described above have not been undertaken, explain why	Not answered.

Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Shaina Rojas Title: Specialist Environmental Email: Shaina_rojas@oxy.com Date: 03/27/2025
----------------------------------------------------	----------------------------------------------------------------------------------------------------------

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/ocd/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

QUESTIONS, Page 3

Action 445609

QUESTIONS (continued)

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 445609
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

QUESTIONS

Site Characterization	
<i>Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Not answered.
What method was used to determine the depth to ground water	Not answered.
Did this release impact groundwater or surface water	Not answered.
What is the minimum distance, between the closest lateral extents of the release and the following surface areas:	
A continuously flowing watercourse or any other significant watercourse	Not answered.
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Not answered.
An occupied permanent residence, school, hospital, institution, or church	Not answered.
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Not answered.
Any other fresh water well or spring	Not answered.
Incorporated municipal boundaries or a defined municipal fresh water well field	Not answered.
A wetland	Not answered.
A subsurface mine	Not answered.
An (non-karst) unstable area	Not answered.
Categorize the risk of this well / site being in a karst geology	Not answered.
A 100-year floodplain	Not answered.
Did the release impact areas not on an exploration, development, production, or storage site	Not answered.

Remediation Plan	
<i>Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.</i>	
Requesting a remediation plan approval with this submission	No
<i>The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.</i>	

Sante Fe Main Office
Phone: (505) 476-3441

General Information
Phone: (505) 629-6116

Online Phone Directory
<https://www.emnrd.nm.gov/oed/contact-us>

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 445609

CONDITIONS

Operator: OCCIDENTAL PERMIAN LTD P.O. Box 4294 Houston, TX 772104294	OGRID: 157984
	Action Number: 445609
	Action Type: [C-141] Initial C-141 (C-141-v-Initial)

CONDITIONS

Created By	Condition	Condition Date
amaxwell	None	3/27/2025