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# **Analytical Report**

2/22/2023

Customer:	Occidental Permian Ltd. Order:		780-4229
Location:	North Hobbs RCF	Received:	2/16/2023
Description:	Monthly Collection	Primary Contact:	Richard Sanders

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

Sample	List						
Fluid	Operator	Location	Site	Sample Point	Date	Time	
CO2	Occidental Permian Ltd.	North Hobbs RCF	2098	CO2 Discharge	2/16/2023	8:44 AM	
CO2	Occidental Permian Ltd.	North Hobbs RCF	2099	CO2 Discharge	2/16/2023	8:38 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	1013	#1 Slug Catcher Inlet	2/16/2023	10:02 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	10002	NGL Plant Inlet	2/16/2023	9:15 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	21013	#2 Slug Catcher Inlet			
Gas	Occidental Permian Ltd.	North Hobbs RCF	21023	#3 Slug Catcher Inlet	2/16/2023	9:54 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	DEX PRO	Inlet	2/16/2023	9:24 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	DEX PRO	Outlet			
Gas	Occidental Permian Ltd.	North Hobbs RCF	Inlet 1	Header	2/16/2023	10:43 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	Inlet 2	Header	2/16/2023	10:38 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	Inlet 3	Header	2/16/2023	10:33 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	Inlet 4	Header	2/16/2023	10:25 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	Inlet 5	Header	2/16/2023	10:21 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	Inlet 6	Header	2/16/2023	10:12 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	Inlet 7	Header	2/16/2023	10:16 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	New 20" Line	Sample Valve	2/16/2023	10:07 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	Reflux Stabilizer	Sample Valve	2/16/2023	9:08 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	ROZ Inlet	Header	2/16/2023	10:46 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	Surge Tank	Propane Vapor	2/16/2023	9:36 AM	
Gas	Occidental Permian Ltd.	North Hobbs RCF	WIB Inlet	Header			
Liquid	Occidental Permian Ltd.	North Hobbs RCF	DEX PRO	Gasoline			
Liquid	Occidental Permian Ltd.	North Hobbs RCF	NGL Storage	NGL	2/16/2023	8:57 AM	

K	Received by OC Liquid	D: 6/25/2024 11:50: Occidental Permian Ltd.	North Hobbs RCF	Stabilizer	Bottoms	2/16/2023	<b>Page 3 of 35</b> 9:11 AM
	Liquid	Occidental Permian Ltd.	North Hobbs RCF	Surge Tank	Propane Liquid	2/16/2023	9:40 AM

No Sample List					
Operator	Location	Site	Sample Point	Comment	
Occidental Permian Ltd.	North Hobbs RCF	21013	#2 Slug Catcher Inlet	No Flow at Sample Point	
Occidental Permian Ltd.	North Hobbs RCF	DEX PRO	Gasoline	Sample Point All Water	
Occidental Permian Ltd.	North Hobbs RCF	DEX PRO	Outlet	Unable to collect sample with Site Setup/Equipment	
Occidental Permian Ltd.	North Hobbs RCF	WIB Inlet	Header	Sample Point All Liquid	

Pantechs Laboratories, Inc. - Order: 780-4229 - Order Date: 2/16/2023

Order Description: North Hobbs RCF, Monthly Collection

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	1405 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	2098	Atm Temp	20 F
Site Type	Meter	Collection Date	02/16/2023
Sample Point	CO2 Discharge	Collection Time	8:44 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID	2098	Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	CO2	Container(s)	YZ8187

**GPA 2177 CO2 Fractional Analysis** 

COMPOUND	FORMULA	MOL%	VOL%	WT%
NITROGEN	N2	1.926	1.218	1.287
CARBON DIOXIDE	CO2	86.999	85.547	91.366
HYDROGEN SULFIDE	H2S	1.015	0.789	0.825
METHANE	C1	6.484	6.340	2.482
ETHANE	C2	1.055	1.628	0.757
PROPANE	C3	1.375	2.186	1.447
I-BUTANE	iC4	0.220	0.415	0.305
N-BUTANE	nC4	0.463	0.842	0.642
I-PENTANE	iC5	0.158	0.334	0.272
N-PENTANE	nC5	0.125	0.261	0.215
HEXANES PLUS	C6+	0.180	0.440	0.402
TOTALS:		100.000	100.000	100.000

Value of "0.000" in fractional interpreted as below detectable limit.

If Onsite H2S testing is performed, its resulting value is used in fractional table

**Liquid Phase Properties** 

SCF/Gal (Ideal)		SCF/Gal (Real)	Mol Weight	Relative Density (60/60)	Vapor Pressure 100F, psia
	58.007	57.680	41.907	0.766	339.7

**Vapor Phase Properties** 

ITEM	BTU/CF	Specific Gr.	Z Factor
DRY	168.45	1.455	0.994
WATER SATURATED	166.46	1.441	0.994

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	1.00 vol%	1.0147	644.32	10,244.7

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	1413 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	2099	Atm Temp	20 F
Site Type	Meter	Collection Date	02/16/2023
Sample Point	CO2 Discharge	Collection Time	8:38 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID	2099	Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	CO2	Container(s)	PLP17207

GPA 2177 CO2 Fractional Analysis

COMPOUND	FORMULA	MOL%	VOL%	WT%
NITROGEN	N2	1.939	1.237	1.318
CARBON DIOXIDE	CO2	85.681	84.959	91.491
HYDROGEN SULFIDE	H2S	1.421	1.114	1.175
METHANE	C1	7.990	7.879	3.110
ETHANE	C2	1.223	1.903	0.892
PROPANE	C3	1.457	2.336	1.559
I-BUTANE	iC4	0.088	0.167	0.124
N-BUTANE	nC4	0.116	0.213	0.164
I-PENTANE	iC5	0.028	0.060	0.049
N-PENTANE	nC5	0.023	0.048	0.040
HEXANES PLUS	C6+	0.034	0.084	0.078
TOTALS:		100.000	100.000	100.000

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

**Liquid Phase Properties** 

SCF/Gal (Ideal)		SCF/Gal (Real)	Mol Weight	Relative Density (60/60)	Vapor Pressure 100F, psia
	58.495	58.179	41.215	0.760	417.8

**Vapor Phase Properties** 

ITEM	BTU/CF	Specific Gr.	Z Factor
DRY	158.86	1.430	0.995
WATER SATURATED	157.03	1.417	0.994

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	1.40 vol%	1.4206	902.05	14,342.6

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	285 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	1013	Atm Temp	31 F
Site Type	Meter	Collection Date	02/16/2023
Sample Point	#1 Slug Catcher Inlet	Collection Time	10:02 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID	1013	Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL1651

**GPA 2261 Gas Fractional Analysis** 

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	2.111	1.425	0.231
CARBON DIOXIDE	CO2	85.193	90.368	14.523
HYDROGEN SULFIDE	H2S	0.727	0.597	0.098
METHANE	C1	7.987	3.088	1.354
ETHANE	C2	1.243	0.901	0.332
PROPANE	C3	1.537	1.634	0.424
I-BUTANE	iC4	0.212	0.297	0.069
N-BUTANE	nC4	0.453	0.635	0.143
I-PENTANE	iC5	0.169	0.294	0.062
N-PENTANE	nC5	0.139	0.242	0.050
HEXANES PLUS	C6+	0.229	0.519	0.097
TOTALS:		100.000	100.000	17.383

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.177	0.845	0.421	0.209	0.318	0.184

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	192.23	1.440	0.994	41.490	160.19
WATER SATURATED	189.83	1.426	0.994	40.765	

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.70 vol%	0.7266	461.36	7,335.6

SAMPLE ID		COLLECTION DATA	COLLECTION DATA		
Operator	Occidental Permian Ltd.	Pressure	282 psig		
Location	North Hobbs RCF	Sample Temp	N/A		
Site	10002	Atm Temp	24 F		
Site Type	Meter	Collection Date	02/16/2023		
Sample Point	NGL Plant Inlet	Collection Time	9:15 AM		
Spot/Comp	Spot	Collection By	Cody Carson		
Meter ID	10002	Pressure Base	14.650 psi		
Purchaser		Temperature Base	60 F		
Fluid	Gas	Container(s)	PL2073		

GPA 2261 Gas Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	1.813	1.222	0.199
CARBON DIOXIDE	CO2	85.319	90.353	14.545
HYDROGEN SULFIDE	H2S	0.921	0.755	0.124
METHANE	C1	7.927	3.060	1.344
ETHANE	C2	1.236	0.894	0.331
PROPANE	C3	1.533	1.627	0.423
I-BUTANE	iC4	0.213	0.298	0.070
N-BUTANE	nC4	0.455	0.636	0.143
I-PENTANE	iC5	0.173	0.300	0.063
N-PENTANE	nC5	0.143	0.248	0.052
HEXANES PLUS	C6+	0.267	0.607	0.114
TOTALS:	11 11 11	100.000	100.000	17.408

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.196	0.865	0.442	0.229	0.351	0.213

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	195.08	1.443	0.994	41.559	162.42
WATER SATURATED	192.64	1.429	0.994	40.832	

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.90 vol%	0.9208	584.72	9,297.0

SAMPLE ID		COLLECTION DATA		
Operator	Occidental Permian Ltd.	Pressure	N/A	
Location	North Hobbs RCF	Sample Temp	N/A	
Site	21013	Atm Temp	N/A	
Site Type	Meter	Collection Date		
Sample Point	#2 Slug Catcher Inlet	Collection Time		
Spot/Comp	Spot	Collection By		
Meter ID	21013	Pressure Base	14.650 psi	
Purchaser		Temperature Base	60 F	
Fluid	Gas	Container(s)		

**No Sample** 

Employee	Comment
Cody Carson	No Flow at Sample Point

SAMPLE ID		COLLECTION DATA		
Operator	Occidental Permian Ltd.	Pressure	289 psig	
Location	North Hobbs RCF	Sample Temp	N/A	
Site	21023	Atm Temp	25 F	
Site Type	Meter	Collection Date	02/16/2023	
Sample Point	#3 Slug Catcher Inlet	Collection Time	9:54 AM	
Spot/Comp	Spot	Collection By	Cody Carson	
Meter ID	21023	Pressure Base	14.650 psi	
Purchaser		Temperature Base	60 F	
Fluid	Gas	Container(s)	PL2159	

**GPA 2261 Gas Fractional Analysis** 

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	1.869	1.238	0.205
CARBON DIOXIDE	CO2	88.530	92.132	15.093
HYDROGEN SULFIDE	H2S	0.543	0.438	0.073
METHANE	C1	5.558	2.108	0.942
ETHANE	C2	0.946	0.673	0.253
PROPANE	C3	1.289	1.344	0.355
I-BUTANE	iC4	0.209	0.287	0.068
N-BUTANE	nC4	0.471	0.647	0.149
I-PENTANE	iC5	0.174	0.297	0.064
N-PENTANE	nC5	0.148	0.252	0.054
HEXANES PLUS	C6+	0.263	0.584	0.112
TOTALS:		100.000	100.000	17.368

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.055	0.802	0.447	0.230	0.352	0.210

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	157.75	1.468	0.994	42.290	130.19
WATER SATURATED	155.94	1.454	0.994	41.551	

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.53 vol%	0.5434	345.05	5,486.3

SAMPLE ID COLLECTION DATA			
Operator	Occidental Permian Ltd.	Pressure	286 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	DEX PRO	Atm Temp	24 F
Site Type	Station	Collection Date	02/16/2023
Sample Point	Inlet	Collection Time	9:24 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL1031

PA 2261 Gas Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	2.089	1.390	0.229
CARBON DIOXIDE	CO2	88.021	91.979	15.005
HYDROGEN SULFIDE	H2S	0.614	0.497	0.083
METHANE	C1	5.839	2.224	0.990
ETHANE	C2	0.978	0.698	0.262
PROPANE	C3	1.311	1.373	0.361
I-BUTANE	iC4	0.210	0.290	0.069
N-BUTANE	nC4	0.460	0.635	0.145
I-PENTANE	iC5	0.160	0.274	0.059
N-PENTANE	nC5	0.130	0.223	0.047
HEXANES PLUS	C6+	0.188	0.417	0.079
TOTALS:		100.000	100.000	17.329

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.022	0.760	0.399	0.185	0.279	0.152

## **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	156.63	1.462	0.994	42.116	129.54
WATER SATURATED	154.84	1.448	0.994	41.380	

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.60 vol%	0.6139	389.82	6,198.1

SAMPLE ID		COLLECTION DATA	COLLECTION DATA		
Operator	Occidental Permian Ltd.	Pressure	N/A		
Location	North Hobbs RCF	Sample Temp	N/A		
Site	DEX PRO	Atm Temp	N/A		
Site Type	Station	Collection Date			
Sample Point	Outlet	Collection Time			
Spot/Comp	Spot	Collection By			
Meter ID		Pressure Base	14.650 psi		
Purchaser		Temperature Base	60 F		
Fluid	Gas	Container(s)			

**No Sample** 

Employee	Comment
Cody Carson	Unable to collect sample with Site Setup/Equipment

SAMPLE ID		COLLECTION DATA		
Operator	Occidental Permian Ltd.	Pressure	293 psig	
Location	North Hobbs RCF	Sample Temp	N/A	
Site	Inlet 1	Atm Temp	31 F	
Site Type	Station	Collection Date	02/16/2023	
Sample Point	Header	Collection Time	10:43 AM	
Spot/Comp	Spot	Collection By	Cody Carson	
Meter ID		Pressure Base	14.650 psi	
Purchaser		Temperature Base	60 F	
Fluid	Gas	Container(s)	PL2478	

GPA 2261 Gas Fractional Analysis

GPA 2261 Gas Fractional Analysis						
COMPOUND	FORMULA	MOL%	WT%	GPM		
NITROGEN	N2	1.964	1.334	0.215		
CARBON DIOXIDE	CO2	84.529	90.199	14.409		
HYDROGEN SULFIDE	H2S	0.623	0.515	0.084		
METHANE	C1	8.770	3.411	1.487		
ETHANE	C2	1.373	1.001	0.367		
PROPANE	C3	1.707	1.825	0.470		
I-BUTANE	iC4	0.197	0.278	0.064		
N-BUTANE	nC4	0.392	0.552	0.124		
I-PENTANE	iC5	0.134	0.234	0.049		
N-PENTANE	nC5	0.113	0.198	0.041		
HEXANES PLUS	C6+	0.198	0.453	0.084		
TOTALS:		100.000	100.000	17.394		

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.199	0.832	0.362	0.174	0.267	0.158

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	199.58	1.431	0.994	41.244	166.81
WATER SATURATED	197.06	1.418	0.994	40.523	

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.60 vol%	0.6228	395.45	6,287.7

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	235 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	Inlet 2	Atm Temp	31 F
Site Type	Station	Collection Date	02/16/2023
Sample Point	Header	Collection Time	10:38 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL2190

GPA 2261 Gas Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	1.901	1.271	0.208
CARBON DIOXIDE	CO2	86.899	91.270	14.814
HYDROGEN SULFIDE	H2S	0.467	0.380	0.063
METHANE	C1	6.826	2.613	1.157
ETHANE	C2	1.125	0.807	0.301
PROPANE	C3	1.488	1.566	0.410
I-BUTANE	iC4	0.238	0.330	0.078
N-BUTANE	nC4	0.517	0.717	0.163
I-PENTANE	iC5	0.176	0.303	0.064
N-PENTANE	nC5	0.139	0.239	0.050
HEXANES PLUS	C6+	0.224	0.504	0.095
TOTALS:		100.000	100.000	17.403

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.161	0.860	0.450	0.209	0.317	0.180

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	178.48	1.455	0.994	41.903	147.99
WATER SATURATED	176.32	1.441	0.994	41.171	

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.45 vol%	0.4671	296.59	4,715.8

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	289 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	Inlet 3	Atm Temp	31 F
Site Type	Station	Collection Date	02/16/2023
Sample Point	Header	Collection Time	10:33 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL2072

PA 2261 Gae Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	1.733	1.132	0.190
CARBON DIOXIDE	CO2	88.493	90.841	15.092
HYDROGEN SULFIDE	H2S	0.623	0.495	0.084
METHANE	C1	4.726	1.768	0.802
ETHANE	C2	0.843	0.591	0.226
PROPANE	C3	1.330	1.368	0.367
I-BUTANE	iC4	0.283	0.384	0.093
N-BUTANE	nC4	0.709	0.961	0.224
I-PENTANE	iC5	0.320	0.539	0.117
N-PENTANE	nC5	0.288	0.485	0.104
HEXANES PLUS	C6+	0.652	1.436	0.278
TOTALS:		100.000	100.000	17.577

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.409	1.183	0.816	0.499	0.754	0.501

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	190.98	1.489	0.994	42.873	156.52
WATER SATURATED	188.61	1.474	0.994	42.124	

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.60 vol%	0.6228	395.45	6,287.7

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	289 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	Inlet 4	Atm Temp	31 F
Site Type	Station	Collection Date	02/16/2023
Sample Point	Header	Collection Time	10:25 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL2462

GPA 2261 Gas Fractional Analysis

COMPOUND COMPOUND	FORMULA	MOL%	WT%	GPM
COMPOUND	FURIMULA	MUL%	W I %	GPIM
NITROGEN	N2	1.927	1.307	0.211
CARBON DIOXIDE	CO2	84.426	89.955	14.392
HYDROGEN SULFIDE	H2S	0.737	0.608	0.099
METHANE	C1	8.773	3.408	1.487
ETHANE	C2	1.343	0.978	0.359
PROPANE	C3	1.595	1.703	0.440
I-BUTANE	iC4	0.204	0.287	0.067
N-BUTANE	nC4	0.423	0.595	0.133
I-PENTANE	iC5	0.154	0.269	0.056
N-PENTANE	nC5	0.131	0.229	0.047
HEXANES PLUS	C6+	0.287	0.661	0.123
TOTALS:		100.000	100.000	17.414

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.225	0.866	0.426	0.226	0.351	0.226

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	204.45	1.434	0.994	41.304	170.75
WATER SATURATED	201.85	1.420	0.994	40.583	

**Onsite Testing by Stain Tube** 

METHOD	ТҮРЕ	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.71 vol%	0.7369	467.95	7,440.4

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	288 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	Inlet 5	Atm Temp	31 F
Site Type	Station	Collection Date	02/16/2023
Sample Point	Header	Collection Time	10:21 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL1554

GPA 2261 Gas Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	1.963	1.330	0.215
CARBON DIOXIDE	CO2	84.761	90.201	14.449
HYDROGEN SULFIDE	H2S	0.747	0.616	0.101
METHANE	C1	8.504	3.299	1.442
ETHANE	C2	1.311	0.953	0.351
PROPANE	C3	1.566	1.670	0.432
I-BUTANE	iC4	0.206	0.290	0.067
N-BUTANE	nC4	0.423	0.595	0.133
I-PENTANE	iC5	0.148	0.258	0.054
N-PENTANE	nC5	0.121	0.211	0.044
HEXANES PLUS	C6+	0.250	0.577	0.107
TOTALS:		100.000	100.000	17.395

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.188	0.837	0.405	0.205	0.317	0.199

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	198.03	1.435	0.994	41.355	165.29
WATER SATURATED	195.54	1.422	0.994	40.632	

**Onsite Testing by Stain Tube** 

METHOD	ТҮРЕ	MEAS VALUE	MOL% GRAINS/100		PPMV
GPA2377	H2S	0.72 vol%	0.7473	474.54	7,545.2

SAMPLE ID		COLLECTION DATA	COLLECTION DATA		
Operator	Occidental Permian Ltd.	Pressure	287 psig		
Location	North Hobbs RCF	Sample Temp	N/A		
Site	Inlet 6	Atm Temp	31 F		
Site Type	Station	Collection Date	02/16/2023		
Sample Point	Header	Collection Time	10:12 AM		
Spot/Comp	Spot	Collection By	Cody Carson		
Meter ID		Pressure Base	14.650 psi		
Purchaser		Temperature Base	60 F		
Fluid	Gas	Container(s)	PL1795		

**GPA 2261 Gas Fractional Analysis** 

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	1.992	1.349	0.218
CARBON DIOXIDE	CO2	84.907	90.326	14.474
HYDROGEN SULFIDE	H2S	0.675	0.556	0.091
METHANE	C1	8.434	3.271	1.430
ETHANE	C2	1.305	0.949	0.349
PROPANE	C3	1.565	1.668	0.431
I-BUTANE	iC4	0.203	0.285	0.066
N-BUTANE	nC4	0.413	0.580	0.130
I-PENTANE	iC5	0.144	0.251	0.053
N-PENTANE	nC5	0.121	0.211	0.044
HEXANES PLUS	C6+	0.241	0.554	0.103
TOTALS:		100.000	100.000	17.389

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.176	0.827	0.396	0.200	0.308	0.192

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	195.64	1.436	0.994	41.370	163.27
WATER SATURATED	193.19	1.422	0.994	40.647	

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.65 vol%	0.6747	428.41	6,811.7

SAMPLE ID		COLLECTION DATA	COLLECTION DATA		
Operator	Occidental Permian Ltd.	Pressure	288 psig		
Location	North Hobbs RCF	Sample Temp	N/A		
Site	Inlet 7	Atm Temp	31 F		
Site Type	Station	Collection Date	02/16/2023		
Sample Point	Header	Collection Time	10:16 AM		
Spot/Comp	Spot	Collection By	Cody Carson		
Meter ID		Pressure Base	14.650 psi		
Purchaser		Temperature Base	60 F		
Fluid	Gas	Container(s)	PL2139		

GPA 2261 Gas Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	1.749	1.127	0.192
CARBON DIOXIDE	CO2	94.063	95.193	16.038
HYDROGEN SULFIDE	H2S	0.197	0.154	0.027
METHANE	C1	1.537	0.567	0.261
ETHANE	C2	0.442	0.306	0.118
PROPANE	C3	0.880	0.892	0.243
I-BUTANE	iC4	0.199	0.266	0.065
N-BUTANE	nC4	0.466	0.623	0.147
I-PENTANE	iC5	0.153	0.254	0.056
N-PENTANE	nC5	0.124	0.206	0.045
HEXANES PLUS	C6+	0.190	0.412	0.081
TOTALS:		100.000	100.000	17.273

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	0.755	0.637	0.394	0.182	0.275	0.155

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	89.54	1.510	0.994	43.487	72.87
WATER SATURATED	88.90	1.495	0.994	42.727	

**Onsite Testing by Stain Tube** 

METHOD	ТҮРЕ	MEAS VALUE	MOL% GRAINS/100		PPMV
GPA2377	H2S	0.19 vol%	0.1972	125.23	1,991.2

SAMPLE ID		COLLECTION DATA		
Operator	Occidental Permian Ltd.	Pressure	287 psig	
Location	North Hobbs RCF	Sample Temp	N/A	
Site	New 20" Line	Atm Temp	31 F	
Site Type	Station	Collection Date	02/16/2023	
Sample Point	Sample Valve	Collection Time	10:07 AM	
Spot/Comp	Spot	Collection By	Cody Carson	
Meter ID		Pressure Base	14.650 psi	
Purchaser		Temperature Base	60 F	
Fluid	Gas	Container(s)	PL1562	

GPA 2261 Gas Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	1.750	1.127	0.192
CARBON DIOXIDE	CO2	93.841	94.909	16.001
HYDROGEN SULFIDE	H2S	0.208	0.163	0.028
METHANE	C1	1.583	0.584	0.268
ETHANE	C2	0.459	0.317	0.123
PROPANE	C3	0.892	0.904	0.246
I-BUTANE	iC4	0.218	0.291	0.071
N-BUTANE	nC4	0.506	0.676	0.160
I-PENTANE	iC5	0.166	0.275	0.061
N-PENTANE	nC5	0.135	0.224	0.049
HEXANES PLUS	C6+	0.242	0.530	0.103
TOTALS:	11.11.11	100.000	100.000	17.302

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	0.813	0.690	0.444	0.213	0.327	0.196

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	96.41	1.511	0.994	43.515	78.43
WATER SATURATED	95.65	1.496	0.994	42.754	

**Onsite Testing by Stain Tube** 

METHOD	ТҮРЕ	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.20 vol%	0.2076	131.82	2,095.9

SAMPLE ID		COLLECTION DATA	COLLECTION DATA		
Operator	Occidental Permian Ltd.	Pressure	220 psig		
Location	North Hobbs RCF	Sample Temp	N/A		
Site	Reflux Stabilizer	Atm Temp	24 F		
Site Type	Station	Collection Date	02/16/2023		
Sample Point	Sample Valve	Collection Time	9:08 AM		
Spot/Comp	Spot	Collection By	Cody Carson		
Meter ID		Pressure Base	14.650 psi		
Purchaser		Temperature Base	60 F		
Fluid	Gas	Container(s)	PL3072		

GPA 2261 Gas Fractional Analysis

COMPOUND	FORMULA	MOL%	WT%	GPM
CONFOOND	FORWOLA	WIOL 76	VV I 76	GFIWI
NITROGEN	N2	1.945	1.321	0.213
CARBON DIOXIDE	CO2	87.099	92.903	14.843
HYDROGEN SULFIDE	H2S	0.031	0.026	0.004
METHANE	C1	8.148	3.168	1.381
ETHANE	C2	1.262	0.920	0.337
PROPANE	C3	1.409	1.506	0.388
I-BUTANE	iC4	0.058	0.082	0.019
N-BUTANE	nC4	0.039	0.055	0.012
I-PENTANE	iC5	0.001	0.002	0.000
N-PENTANE	nC5	0.002	0.003	0.001
HEXANES PLUS	C6+	0.006	0.014	0.003
TOTALS:		100.000	100.000	17.201

Value of "0.000" in fractional interpreted as below detectable limit.

If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	0.760	0.423	0.035	0.004	0.006	0.004

## **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	144.19	1.432	0.995	41.260	120.50
WATER SATURATED	142.61	1.418	0.994	40.539	

SAMPLE ID		COLLECTION DATA	COLLECTION DATA		
Operator	Occidental Permian Ltd.	Pressure	293 psig		
Location	North Hobbs RCF	Sample Temp	N/A		
Site	ROZ Inlet	Atm Temp	31 F		
Site Type	Station	Collection Date	02/16/2023		
Sample Point	Header	Collection Time	10:46 AM		
Spot/Comp	Spot	Collection By	Cody Carson		
Meter ID		Pressure Base	14.650 psi		
Purchaser		Temperature Base	60 F		
Fluid	Gas	Container(s)	PL0470		

GPA 2261 Gas Fractional Analysis

GPA 2261 Gas Fractional Analysis				
COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	1.851	1.243	0.203
CARBON DIOXIDE	CO2	85.814	90.568	14.630
HYDROGEN SULFIDE	H2S	0.623	0.509	0.084
METHANE	C1	7.652	2.944	1.297
ETHANE	C2	1.194	0.861	0.319
PROPANE	C3	1.508	1.595	0.416
I-BUTANE	iC4	0.219	0.305	0.072
N-BUTANE	nC4	0.476	0.663	0.150
I-PENTANE	iC5	0.192	0.332	0.070
N-PENTANE	nC5	0.162	0.280	0.059
HEXANES PLUS	C6+	0.309	0.700	0.131
TOTALS:		100.000	100.000	17.431

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	1.217	0.898	0.482	0.260	0.400	0.245

### **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	193.60	1.448	0.994	41.700	160.92
WATER SATURATED	191.18	1.434	0.994	40.972	

**Onsite Testing by Stain Tube** 

METHOD	TYPE	MEAS VALUE	MOL%	GRAINS/100	PPMV
GPA2377	H2S	0.60 vol%	0.6228	395.45	6,287.7

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	85 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	Surge Tank	Atm Temp	24 F
Site Type	Tank	Collection Date	02/16/2023
Sample Point	Propane Vapor	Collection Time	9:36 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	PL2362

GPA 2261 Gas Fractional Analysis

GPA 2261 Gas Fractional Analysis				
COMPOUND	FORMULA	MOL%	WT%	GPM
NITROGEN	N2	0.317	0.217	0.035
CARBON DIOXIDE	CO2	0.185	0.199	0.032
HYDROGEN SULFIDE	H2S	0.000	0.000	0.000
METHANE	C1	0.682	0.268	0.117
ETHANE	C2	21.631	15.930	5.841
PROPANE	C3	77.141	83.313	21.460
I-BUTANE	iC4	0.022	0.031	0.007
N-BUTANE	nC4	0.009	0.013	0.003
I-PENTANE	iC5	0.002	0.004	0.001
N-PENTANE	nC5	0.002	0.004	0.001
HEXANES PLUS	C6+	0.009	0.021	0.004
TOTALS:		100.000	100.000	27.501

Value of "0.000" in fractional interpreted as below detectable limit. If Onsite H2S testing is performed, its resulting value is used in fractional table

LIQUID YIELD	C2+	C3+	C4+	C5+	26# Liquid	10# Liquid
GAL/MSCF (GPM)	27.317	21.476	0.016	0.006	0.009	0.006

## **GPA 2172/ASTM D3588 CALCULATED PROPERTIES**

WATER CONTENT	BTU/CF	Specific Gr.	Z Factor	Mol Weight	Wobbe IDX
DRY	2,360.06	1.431	0.985	40.831	1,973.20
WATER SATURATED	2,320.84	1.417	0.985	40.117	

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	N/A
Location	North Hobbs RCF	Sample Temp	N/A
Site	WIB Inlet	Atm Temp	N/A
Site Type	Station	Collection Date	
Sample Point	Header	Collection Time	
Spot/Comp	Spot	Collection By	
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Gas	Container(s)	

No Sample

Employee	Comment
Cody Carson	Sample Point All Liquid

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	N/A
Location	North Hobbs RCF	Sample Temp	N/A
Site	DEX PRO	Atm Temp	N/A
Site Type	Station	Collection Date	
Sample Point	Gasoline	Collection Time	
Spot/Comp	Spot	Collection By	
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Liquid	Container(s)	

No Sample

Employee	Comment
Cody Carson	Sample Point All Water

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	1000 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	NGL Storage	Atm Temp	24 F
Site Type	Vessel	Collection Date	02/16/2023
Sample Point	NGL	Collection Time	8:57 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Liquid	Container(s)	PL0693

GPA 2177 Liquid Fractional Analysis

COMPOUND	FORMULA	MOL%	VOL%	WT%
NITROGEN	N2	0.021	0.007	0.009
CARBON DIOXIDE	CO2	0.010	0.005	0.007
HYDROGEN SULFIDE	H2S	0.000	0.000	0.000
METHANE	C1	0.000	0.000	0.000
ETHANE	C2	0.000	0.000	0.000
PROPANE	C3	18.537	15.145	12.740
I-BUTANE	iC4	11.987	11.627	10.859
N-BUTANE	nC4	31.181	29.148	28.247
I-PENTANE	iC5	12.490	13.557	14.045
N-PENTANE	nC5	10.165	10.916	11.431
HEXANES PLUS	C6+	15.609	19.595	22.662
TOTALS:		100.000	100.000	100.000

Value of "0.000" in fractional interpreted as below detectable limit.

**Calculated Properties** 

SCF/Gal (Ideal)	SCF/Gal (Real)	Mol Weight	Relative Density (60/60)	Vapor Pressure 100F, psia	Reid VP Equivalent, psi
29.815	28.544	64.161	0.603	64.6	61.4

SAMPLE ID		COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	280 psig
Location	North Hobbs RCF	Sample Temp	N/A
Site	Stabilizer	Atm Temp	24 F
Site Type	Vessel	Collection Date	02/16/2023
Sample Point	Bottoms	Collection Time	9:11 AM
Spot/Comp	Spot	Collection By	Cody Carson
Meter ID		Pressure Base	14.650 psi
Purchaser		Temperature Base	60 F
Fluid	Liquid	Container(s)	PL2472

GPA 2177 Liquid Fractional Analysis

COMPOUND	FORMULA	MOL%	VOL%	WT%
NITROGEN	N2	0.100	0.035	0.049
CARBON DIOXIDE	CO2	0.019	0.010	0.015
HYDROGEN SULFIDE	H2S	0.000	0.000	0.000
METHANE	C1	0.000	0.000	0.000
ETHANE	C2	0.000	0.000	0.000
PROPANE	C3	33.801	29.523	26.163
I-BUTANE	iC4	15.815	16.399	16.135
N-BUTANE	nC4	32.091	32.069	32.739
I-PENTANE	iC5	7.403	8.590	9.375
N-PENTANE	nC5	5.389	6.187	6.825
HEXANES PLUS	C6+	5.382	7.187	8.699
TOTALS:		100.000	100.000	100.000

Value of "0.000" in fractional interpreted as below detectable limit.

**Calculated Properties** 

SCF/Gal (Ideal)	SCF/Gal (Real)	Mol Weight	Relative Density (60/60)	Vapor Pressure 100F, psia	Reid VP Equivalent, psi
31.871	30.862	56.972	0.572	94.4	89.9

SAMPLE ID		COLLECTION DATA	COLLECTION DATA	
Operator	Occidental Permian Ltd.	Pressure	85 psig	
Location	North Hobbs RCF	Sample Temp	N/A	
Site	Surge Tank	Atm Temp	24 F	
Site Type	Tank	Collection Date	02/16/2023	
Sample Point	Propane Liquid	Collection Time	9:40 AM	
Spot/Comp	Spot	Collection By	Cody Carson	
Meter ID		Pressure Base	14.650 psi	
Purchaser		Temperature Base	60 F	
Fluid	Liquid	Container(s)	PL2210	

GPA 2177 Liquid Fractional Analysis

COMPOUND	FORMULA	MOL%	VOL%	WT%
NITROGEN	N2	0.009	0.004	0.006
CARBON DIOXIDE	CO2	0.006	0.004	0.006
HYDROGEN SULFIDE	H2S	0.000	0.000	0.000
METHANE	C1	0.011	0.007	0.004
ETHANE	C2	1.799	1.747	1.233
PROPANE	C3	98.071	98.107	98.596
I-BUTANE	iC4	0.073	0.087	0.097
N-BUTANE	nC4	0.011	0.013	0.015
I-PENTANE	iC5	0.003	0.004	0.005
N-PENTANE	nC5	0.002	0.003	0.003
HEXANES PLUS	C6+	0.015	0.024	0.035
TOTALS:		100.000	100.000	100.000

Value of "0.000" in fractional interpreted as below detectable limit.

**Calculated Properties** 

SCF/Gal (Ideal)	SCF/Gal (Real)	Mol Weight	Relative Density (60/60)	Vapor Pressure 100F, psia	Reid VP Equivalent, psi
36.504	35.877	43.862	0.504	200.0	191.1

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### **UPSET FLARING EVENT SPECIFIC JUSTIFICATIONS FORM**

Facility: North Hobbs Unit RCF Flare Date: 3/29/2024

Duration of event: 4 hrs and 7 mins MCF Flared: 712 MCF

**Start Time:** 3/29/2024 4:53 **End Time:** 3/29/2024 9:00 PM

Cause: Compression Equipment Malfunction > HiHI Discharge PSI > Hot Valves > Replaced Valves

Method of Flared Gas Measurement: Gas Flare Meter

Comments: This upset event was not caused by any wells associated with the facility

#### 1. Reason why this event was beyond Operator's control:

Oxy engages in respectable and good facility operation practices while also maintaining its continuous equipment preventative maintenance program. Internal OXY procedures ensure that upon a gas compressor unit shutdown, production techs are promptly notified via an equipment alarm notification app and are trained to respond immediately in order to assess the issue as soon as possible, so that prompt corrective actions are taken to minimize emissions. Oxy production techs must assess whether a gas compressor unit shutdown is due to damage and repair is needed, or whether there are other reasons for its cause.

In this case operations had to call mechanics out to replace the hot valves on the compressor.

### 2. Steps Taken to limit duration and magnitude of venting or flaring:

It is OXY's policy to route all stranded sales gas to a flare during a sudden, unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. The flare is regularly monitored to the ensure flame is lit and meeting opacity requirements. In this case, the immediate steps taken to limit duration and magnitude of flaring was for the Oxy production tech, called a third party company out to replace the valves on the unit.

3. Corrective Actions taken to eliminate the cause and reoccurrence of venting or flaring: The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is OXY's policy to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of compressor malfunctions as notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. Oxy continually strives to maintain and operate its facility equipment in

a manner consistent with good practices for minimizing emissions and reducing the number of emission events. The only actions that Oxy can take and handle that is within its control, is to continue with its compression equipment preventative maintenance program for this facility's compression equipment.

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

DEFINITIONS

Action 357328

#### **DEFINITIONS**

Operator:	OGRID:
OCCIDENTAL PERMIAN LTD	157984
P.O. Box 4294	Action Number:
Houston, TX 772104294	357328
	Action Type:
	[C-129] Amend Venting and/or Flaring (C-129A)

#### **DEFINITIONS**

For the sake of brevity and completeness, please allow for the following in all groups of questions and for the rest of this application:

- this application's operator, hereinafter "this operator";
- · venting and/or flaring, hereinafter "vent or flare";
- any notification or report(s) of the C-129 form family, hereinafter "any C-129 forms";
- the statements in (and/or attached to) this, hereinafter "the statements in this";
- and the past tense will be used in lieu of mixed past/present tense questions and statements.

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QUESTIONS

Action 357328

Q	UESTIONS		
Operator:	OGRID:		
OCCIDENTAL PERMIAN LTD P.O. Box 4294	157984 Action Number:		
Houston, TX 772104294	357328		
	Action Type:  [C-129] Amend Venting and/or Flaring (C-129A)		
QUESTIONS	[ ]ggg		
Prerequisites			
Any messages presented in this section, will prevent submission of this application. Please resolve	these issues before continuing with the rest of the questions.		
Incident ID (n#)	Unavailable.		
Incident Name	Unavailable.		
Incident Type	Flare		
Incident Status	Unavailable.		
Incident Facility	[fKJ1517634129] NORTH HOBBS RECOMPRESSION FACILITY & GAS PLANT		
Only valid Vent, Flare or Vent with Flaring incidents (selected above in the Application Details section)	on) that are assigned to your current operator can be amended with this C-129A application.		
Determination of Describe Describerance			
Determination of Reporting Requirements	nau nau nau dia adia adia adia ada mana		
Answer all questions that apply. The Reason(s) statements are calculated based on your answers a  Was this vent or flare caused by an emergency or malfunction	Yes		
Did this vent or flare last eight hours or more cumulatively within any 24-hour	No No		
period from a single event  Is this considered a submission for a vent or flare event	Yes, major venting and/or flaring of natural gas.		
As a second seco			
An operator shall file a form C-141 instead of a form C-129 for a release that, includes liquid during was there at least 50 MCF of natural gas vented and/or flared during this event	Yes		
Did this vent or flare result in the release of <b>ANY</b> liquids (not fully and/or completely	Tes		
flared) that reached (or has a chance of reaching) the ground, a surface, a watercourse, or otherwise, with reasonable probability, endanger public health, the environment or fresh water	No		
Was the vent or flare within an incorporated municipal boundary or withing 300 feet from an occupied permanent residence, school, hospital, institution or church in existence	No		
Equipment Involved			
Primary Equipment Involved	Producing Well		
Additional details for Equipment Involved. Please specify	Compression Equipment Malfunction > HiHI Discharge PSI > Hot Valves > Replaced Valves		
Parameteristics Communities and Analysis of Wanted at Flored National Co.			
Representative Compositional Analysis of Vented or Flared Natural Gas			
Please provide the mole percent for the percentage questions in this group.  Methane (CH4) percentage	6		
Nitrogen (N2) percentage, if greater than one percent			
Hydrogen (N2) percentage, if greater than one percent  Hydrogen Sulfide (H2S) PPM, rounded up	2		
	6,140		
Carbon Dioxide (C02) percentage, if greater than one percent	88		
Oxygen (02) percentage, if greater than one percent	0		
If you are venting and/or flaring because of Pipeline Specification, please provide the required spec	cifications for each gas.		
Methane (CH4) percentage quality requirement	0		

0

0

0

Carbon Dioxide (C02) percentage quality requirement

Nitrogen (N2) percentage quality requirement Hydrogen Sufide (H2S) PPM quality requirement

Oxygen (02) percentage quality requirement

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## **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 357328

QUESTIONS (	(continued)

Operator:	OGRID:
OCCIDENTAL PERMIAN LTD	157984
P.O. Box 4294	Action Number:
Houston, TX 772104294	357328
	Action Type:
	[C-129] Amend Venting and/or Flaring (C-129A)

#### QUESTIONS

Date(s) and Time(s)	
Date vent or flare was discovered or commenced	03/29/2024
Time vent or flare was discovered or commenced	04:53 PM
Time vent or flare was terminated	09:00 PM
Cumulative hours during this event	4

Measured or Estimated Volume of Vented or Flared Natural Gas	
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Cause: Equipment Failure   Producing Well   Natural Gas Flared   Released: 712 MCF   Recovered: 0 MCF   Lost: 712 MCF.
Other Released Details	Not answered.
Additional details for Measured or Estimated Volume(s). Please specify	Gas Flare Meter
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.

Venting or Flaring Resulting from Downstream Activity	
Was this vent or flare a result of downstream activity	No
Was notification of downstream activity received by this operator	No
Downstream OGRID that should have notified this operator	0
Date notified of downstream activity requiring this vent or flare	
Time notified of downstream activity requiring this vent or flare	12:00 AM

teps and Actions to Prevent Waste	
For this event, this operator could not have reasonably anticipated the current event and it was beyond this operator's control	True
Please explain reason for why this event was beyond this operator's control	Oxy engages in respectable and good facility operation practices while also maintaining its continuous equipment preventative maintenance program. Internal OXY procedures ensure that upon a gas compressor unit shutdown, production techs are promptly notified via an equipment alarm notification app and are trained to respond immediately in order to assess the issue as soon as possible, so that prompt corrective actions are taken to minimize emissions. Oxy production techs must assess whether a gas compressor unit shutdown is due to damage and repair is needed, or whether there are other reasons for its cause. In this case operations had to call mechanics out to replace the hot valves on the compressor.
Steps taken to limit the duration and magnitude of vent or flare	It is OXY's policy to route all stranded sales gas to a flare during a sudden, unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. The flare at this facility has a 98% combustion efficiency in order to lessen emissions as much as possible. The flare is regularly, monitored to the ensure flame is lit and meeting opacity requirements. In this case, the immediate steps taken to limit duration and magnitude of flaring was for the Oxy production tech, called a third-party company out to replace the valves on the unit.
	The emissions event was caused by the unforeseen, unexpected, sudden, and unavoidable breakdown of equipment or process that was beyond the owner/operator's control and did not stem from activity that could have been foreseen and avoided, and could not have been avoided by good design, operation, and preventative maintenance practices. It is OXY's policy

Corrective actions taken to eliminate the cause and reoccurrence of vent or flare

to route all stranded sales gas to a flare during an unforeseen and unavoidable emergency or malfunction, in order to minimize emissions as much as possible. Oxy cannot take any corrective actions to eliminate the cause and potential reoccurrence of compressor malfunctions as notwithstanding proper gas compressor design and operation, various forms of mechanical or technical issues can be sudden, reasonably unforeseeable and unexpected which can cause compressor unit malfunctions to occur without warning or advance notice. Oxy continually strives to maintain and operate its facility equipment in a manner consistent with good practices for minimizing emissions and reducing the number of emission events. The only actions that Oxy can take and handle that is within its control, is to continue with its compression equipment preventative maintenance program for this facility's compression equipment.

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ACKNOWLEDGMENTS

Action 357328

#### **ACKNOWLEDGMENTS**

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#### **ACKNOWLEDGMENTS**

▽	I acknowledge that with this application I will be amending an existing incident file (assigned to this operator) for a vent or flare event, pursuant to 19.15.27 and 19.15.28 NMAC.
V	I acknowledge that amending an incident file does not replace original submitted application(s) or information and understand that any C-129 forms submitted to the OCD will be logged and stored as public record.
✓	I hereby certify the statements in this amending report are true and correct to the best of my knowledge and acknowledge that any false statement may be subject to civil and criminal penalties under the Oil and Gas Act.
V	I acknowledge that the acceptance of any C-129 forms by the OCD does not relieve this operator of liability should their operations have failed to adequately investigate, report, and remediate contamination that poses a threat to groundwater, surface water, human health, or the environment.
✓	I acknowledge that OCD acceptance of any C-129 forms does not relieve this operator of responsibility for compliance with any other applicable federal, state, or local laws and/or regulations.

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CONDITIONS

Action 357328

#### **CONDITIONS**

Operator:	OGRID:
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P.O. Box 4294	Action Number:
Houston, TX 772104294	357328
	Action Type:
	[C-129] Amend Venting and/or Flaring (C-129A)

#### CONDITIONS

Created By		Condition Date
shelbyschoepf	If the information provided in this report requires further amendment(s), submit a [C-129] Amend Venting and/or Flaring Incident (C-129A), utilizing your incident number from this event.	6/25/2024