

Sunco SWD #1

30-045-28653

Class I Disposal: UICI-5-0

2024 Fall off Test

Agua Moss, LLC

P.O Box 600

Farmington, NM 87499

ORGID 247130

Report Components:

1. Facility Operator Information
 - a. Agua Moss, LLC
 - b. PO Box 600 Farmington, NM 87499
 - c. OGRID 247130
2. Well Information:
 - a. UIC Permit # UICI-5-0
 - b. Class I
 - c. Sunco Disposal #1
 - d. 30-045-28653
 - e. UL E, Sec 2, T29N, R12W 1595 FNL & 1005 FWL San Juan County
3. Current Wellbore Diagram: **Attached** (Page 4)
4. Copy of Electronic Log: **Previously submitted 1992** (Page 29)
5. Copy of Porosity Log: **Previously submitted 1992** (Page 30)
6. See attached Fall off Test Analysis
 - a. Fall off Test Procedure (Page 5)
 - b. Analysis (Page 5)
 - c. Results (Page 19)
7. Results Comparison (Page 20)
8. Conclusion (Page 20)
9. The raw test data will be kept on file for a period of 3-years and will be made available to the NMOCD upon written request. (Page 21)
10. Any pressure or temperature anomaly: None
11. Plots attached
 - a. Pressure and Rate (fig 3) (Page 22)
 - b. Injection Rate vs Time (fig 4) (Page 23)
 - c. Pressure and Rate (fig 5) (Page 24)
 - d. Elapsed Time (fig 2) (Page 5)
 - e. Derivative Plot (fig 6) (Page 25)
 - f. Horner Plot (fig 7) (Page 26)
 - g. Elapsed Gauge Time (fig 8) (Page 27)
 - h. Injection Volumes and Surface Pressure (fig 9) (Page 28)
12. NO PVT data necessary, wellbore fluid is fresh-to-slightly saline water. No significant hydrocarbons present that would alter the density, compressibility and/or viscosity of the fluid.
13. The Agua Moss, LLC internal Daily Injection Reports were used to determine the appropriate injection history to use for the analysis. A summary of those reports (January 2023 through September 2023) see attachment Sunco Monthly Reports.
14. The Sunco Disposal #1 has injected approximately 18,038,473 bbls into the point lookout formation from 1994 through August 2024. The offset well McGrath SWD #4 API 30-045-25923 was plugged 7/25/2013. Cumulative injection 1994-7/2013 27,746,479 bbls.
15. 2 Mile AOR: Updated 10/22/2024 see attached AOR Report
 - a. AOR 2 mile
 - b. AOR 2 mile well data

- c. The McGrath #4 was the only offset well that was injecting into the Point Lookout formation within 1 mile. This well was plugged 7/25/2013.
- 16. Geological information was provided in the 2012 Permit renewal and approved in 2012.
- 17. Offset Wells: One offset well that was completed in the same injection interval was the McGrath #4. This well was plugged 7/2013 and therefore was not impacted.
- 18. Chronological listing of the daily, testing activities (Operations Log) attached (page 21)
 - a. Date of Test: 09/09/2024 – 09/12/2024
 - b. Type of injection fluid: Produced water
 - c. Final Injection Pressure & Temp prior to shutting in the well: 2133 psi, 72°F
 - d. Total shut-in time: 258 hours
 - e. Final static pressure & temp at the end of the fall-off portion of the test: 3342 psi, 49°F
- 19. Location of the shut-in valve: A wing valve located on the well's Christmas tree was closed to begin the FOT
- 20. Pressure Gauges: (pages 31)
 - a. WIKA CPG1500 Precision digital gauges
 - b. Pressure range: 0-3,000 psi
 - c. Last Calibration: 8/13/2024

Wellbore Schematic:

Agua Moss, LLC Wellbore Schematic

Sunco No. 1, SWD

Current Wellbore Configuration

Location: 1595' fnt & 1005' fwf
Sec 2, T29N, R12W
San Juan Co, New Mexico

Updated: 2024-09-12 SCM

Elevation: 5,859' GL
5,872' RKB

By: J. Ryan Davis

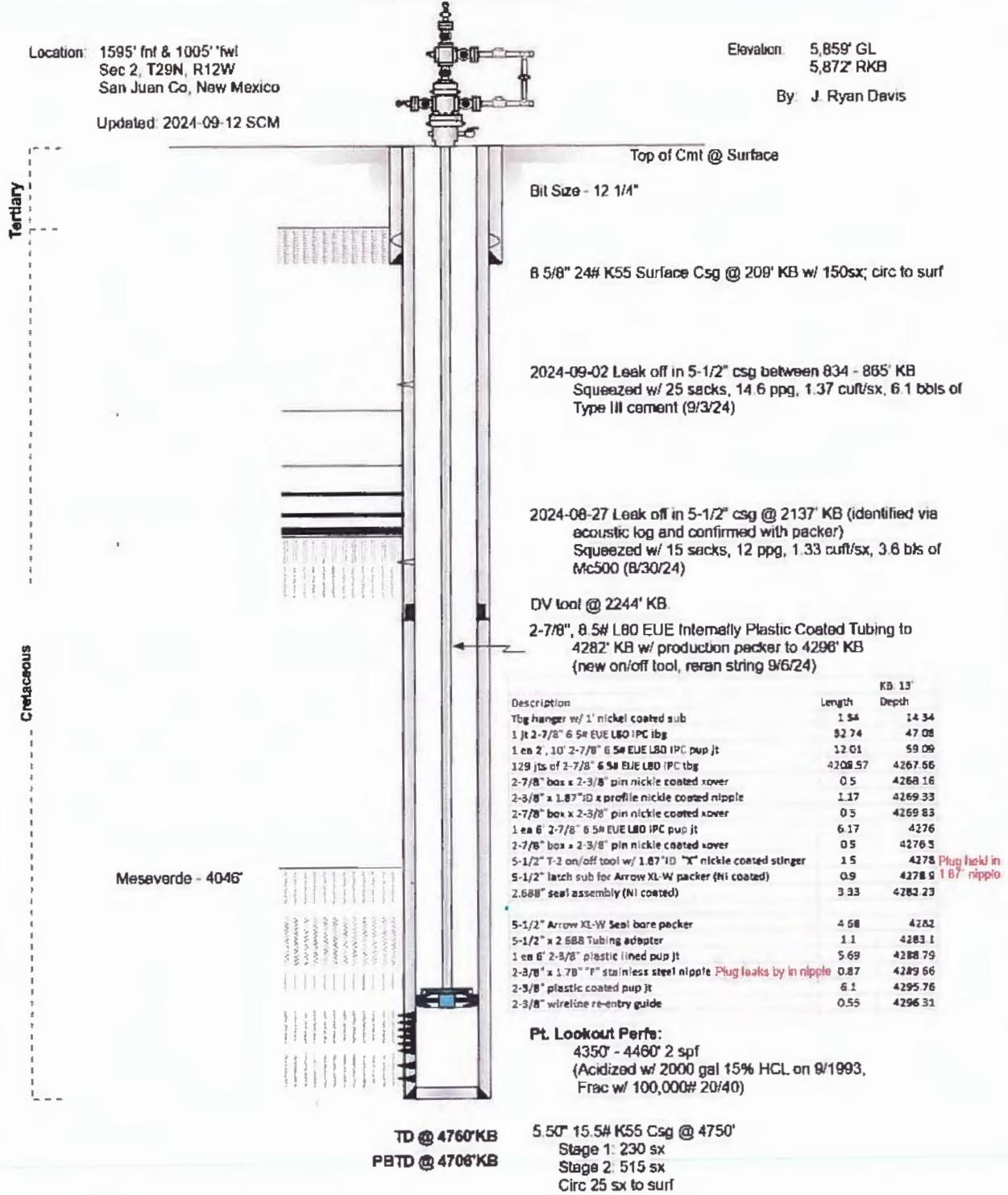


Figure 1: Wellbore Schematic

At the request of the NMOCD and permit requirements, a Falloff Test (FOT) was performed on the Sunco SWD #1 Class I injection well (UICI-5-0) from **09/09/2024** to **09/23/2024**. Below is a summary of findings from the FOT.

Procedure:

Surface pressures were recorded with two WIKA CPG1500 Precision digital gauges installed at the wellhead. The initial BHP was calculated to be 3344 psi at a depth of 4405'. The injection period started at 1:19 pm on 09/09/2024, with a total of 9,810 bbls injected over 72 hours and an average injection rate of 3,232 bpd (94 gpm). The final bottom hole injection pressure was 4040 psi. Injection was shut down and the well was shut it at the wellhead at 2:06 pm on 09/12/2024. The bottom hole pressures were monitored for 258 hours of pressure falloff. The final BHP was 3342 psi.

Analysis:

The FOT data was compiled in excel and analyzed. The data was also given to a third party consultant for further analysis and confirmation of results, the analysis is found on pages 6-18.

A Cartesian plot of pressure and temperature versus elapsed time is presented in Figure 2 below. The stabilization of pressure was confirmed prior to shut-in. The plot was reviewed for anomalous data and none was found.

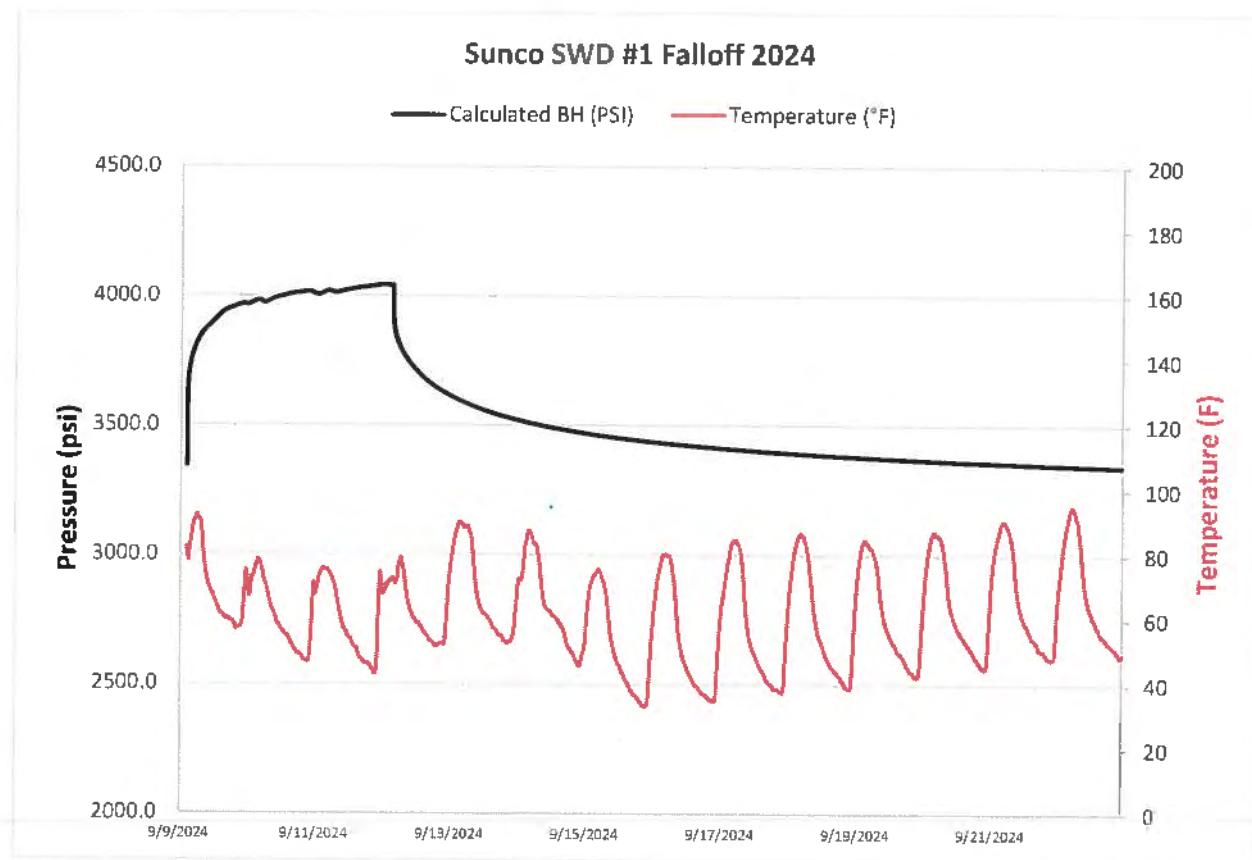


Figure 2 BH Pressure and Temperature vs. Time

IRT Analysis



**2024 Fall-off Pressure Test Analysis
for the
Sunco Disposal Well #1
San Juan County, New Mexico**

prepared for

Merrion Oil and Gas Corporation

10 October 2024

**International Reservoir Technologies, Inc.
Lakewood, Colorado, USA**

**Tel. (303) 279-0877
Fax (303) 279-0936**



Sunco Disposal Well #1 2024 Fall-off Test Results

Summary:

A set of satisfactory results were obtained for the 2024 fall off test (FOT) for the Sunco Disposal Well #1 using the four different pressure transient analysis methods as described below. The calculated results are comparable to the fall-off test results from previous years.

The conventional straight-line analysis for extrapolated pressure and the reservoir property calculations from the MDH type plot, the Horner and the derivative plot results are reasonable. A type curve analysis was performed as well which confirmed these results. The input parameters for the fluid properties (i.e. PVT data) were the same as the previous tests with the source being the report titled "2nd Quarter 2016 Sampling - Injection Well.pdf", "NM1-9 INJECTION WELL ANALYTICAL RESULTS, Agua Moss Disposal Facility, Crouch Mesa Road, San Juan County, New Mexico, 6/28/16." It was assumed that there was no fill over the perforated injection interval. As noted in previous reports, the pressure transient effects of the induced hydraulic fracture and the wellbore storage effects do obscure to some extent the reservoir property influences.

The analysis was performed using the provided BHP datum pressure data, which had been converted from the recorded THP data. The results were consistent and are summarized in the table and the average calculated properties were:

- Estimated Kw (permeability) = 11.4 md
- Estimated skin = -5.4
- Extrapolated pressure = 3,418 psig
- Fracture half-length = 496 feet (from derivative half-slope line)
- Radius of investigation = 1,460 feet

Calculated Reservoir Parameters - Gauge (Adjusted to BH Datum)					
	Horner Analysis	MDH Plot	Derivative Plot	Type Curve	Average
Estimated Kw (permeability, mD)	12.1	12.7	9.5	11.3	11.4
Estimated skin (dimensionless)	-5.3	-5.4	-5.5	-5.5	-5.4
Extrapolated pressure (psig)	3,425	3,458	3,371	--	3,418
Fracture half-length (feet)	--	--	496	--	496
Radius of investigation (feet)	--	1460' at 94 hrs	--	--	--



Input data and assumptions:

Assumptions:

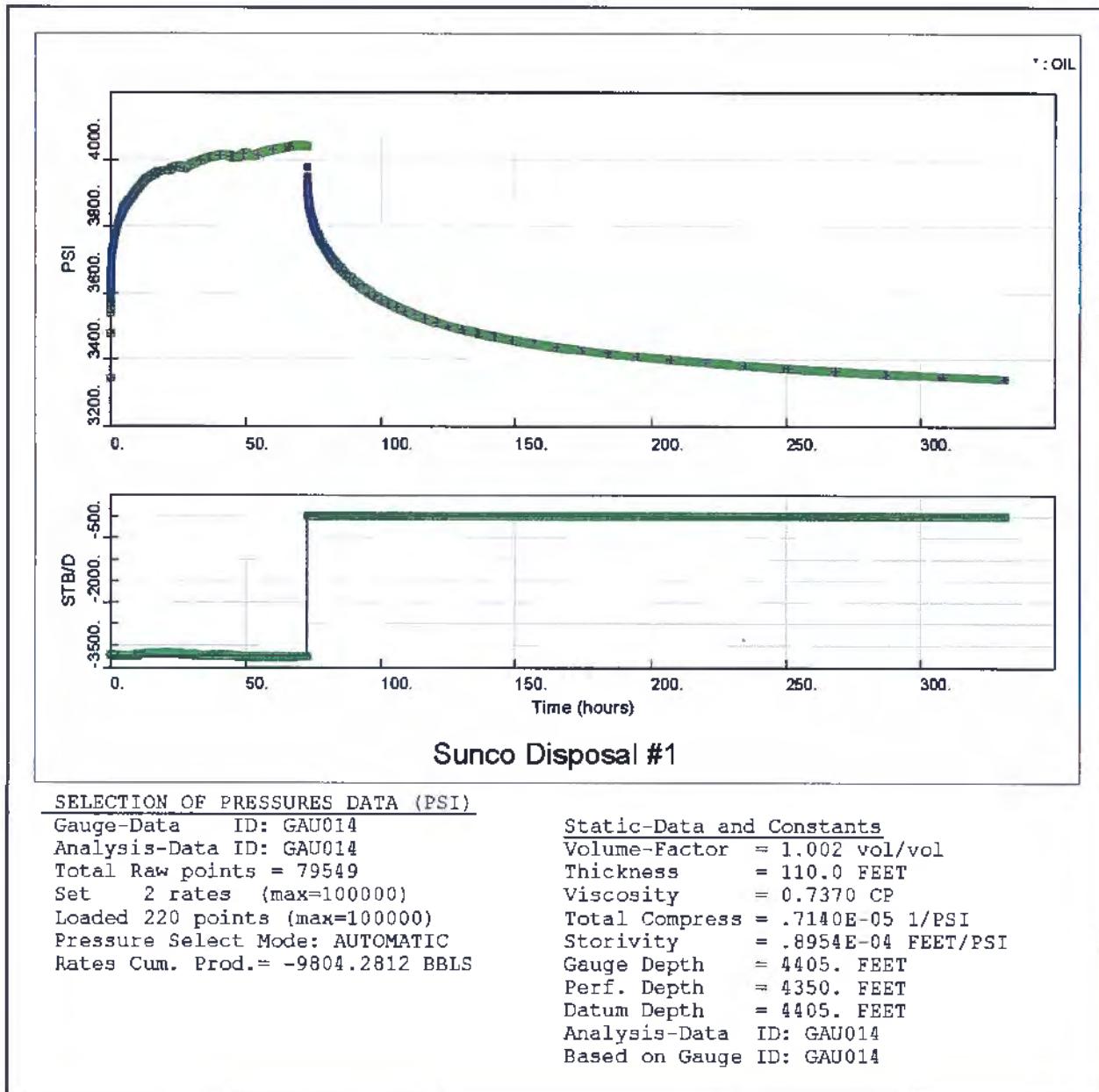
- o Formation fluid properties equal injection water properties due to cumulative volume injected and miscibility of formation water and injection water
- o Reservoir temperature = 91 deg F
- o Porosity = 0.114 (fraction, estimated from density log)
- o Net pay = 110 feet
- o Rock compressibility = 4.50E-06 1/psi (correlation)
- o Wellbore radius = 0.506 ft
- o Wellbore volume total = 34.88 bbls (tubing = 24.79 bbls, casing = 10.09 bbls)
- o Wellbore compressibility = injection water compressibility = 2.64E-06 1/psi (from Osif correlation)
- o Injected water specific gravity = 1.00 (pure water = 1.0)
- o Injected water FVF = 1.0023 rb/stb (McCain correlation)
- o Injected water viscosity = 0.737 cp (McCain correlation)

Larger versions of the following analysis plots appear at the end of this document.



This plot shows the final BH datum adjusted pressure data and the injection rate data.

FINAL PRESSURE AND RATE DATA AS ENTERED INTO PTA SOFTWARE:



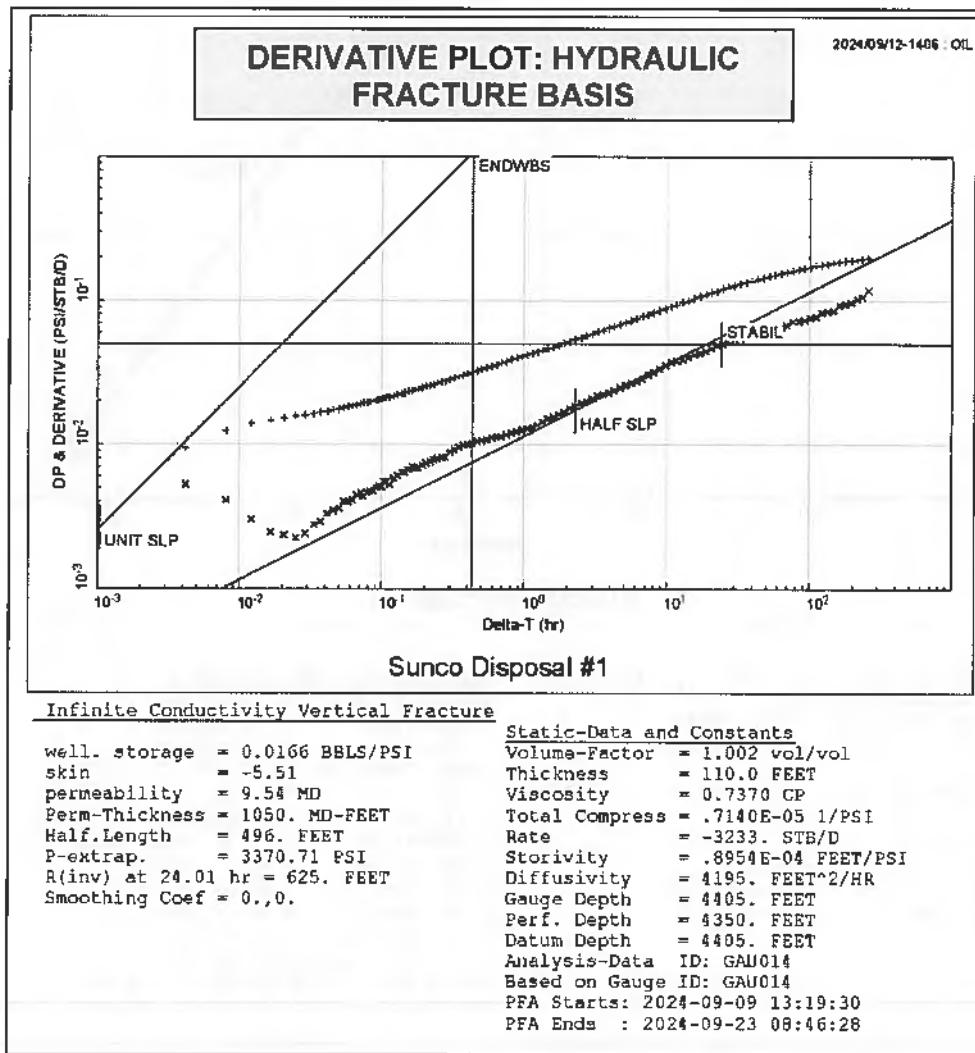


DERIVATIVE PLOT:

Conclusions: The behavior of the derivative curve is affected by the wellbore storage and the influence of an apparent hydraulic fracture. The derivative analysis was made using a hydraulic fracture reservoir model, to best calculate the reservoir properties.

The plot below implies a half-slope as shown in the derivative curve which is characteristic of linear-flow due to a hydraulic-fracture. The calculated permeability is 9.5 md and the calculated half-length for the fracture was 496 feet.

- Estimated Kw (permeability) = 9.5 md
- Estimated skin = -5.5
- Fracture half-length = 496 feet
- Estimated extrapolated pressure = 3,371 psig

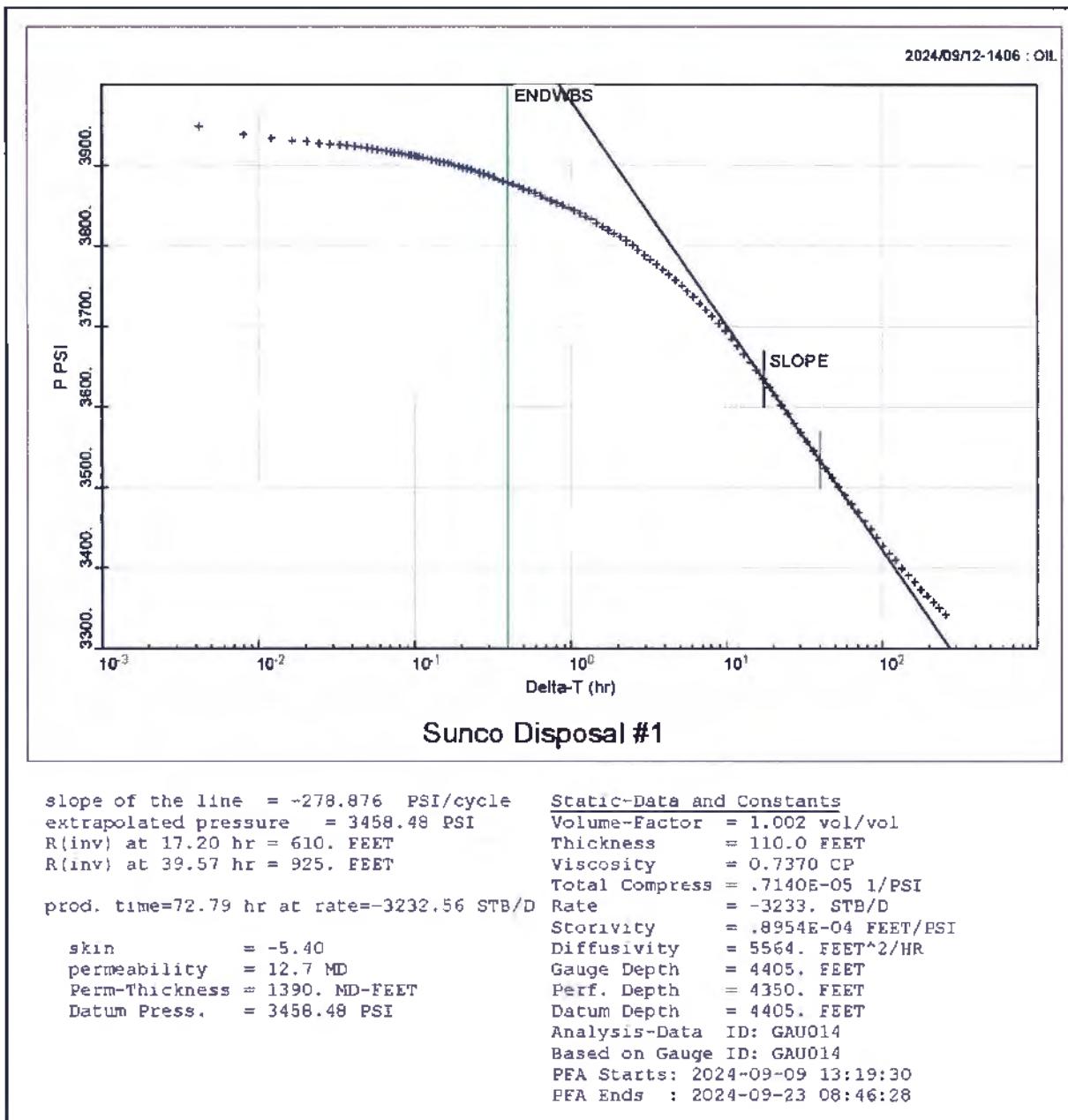




MDH PLOT:

Conclusions: The MDH stabilized flow period value appears reasonable.

- Estimated extrapolated pressure = 3,458 psig
- Estimated Kw (permeability) = 12.7 md
- Estimated skin = -5.4
- Radius of investigation = 1,460 feet at 94 hours

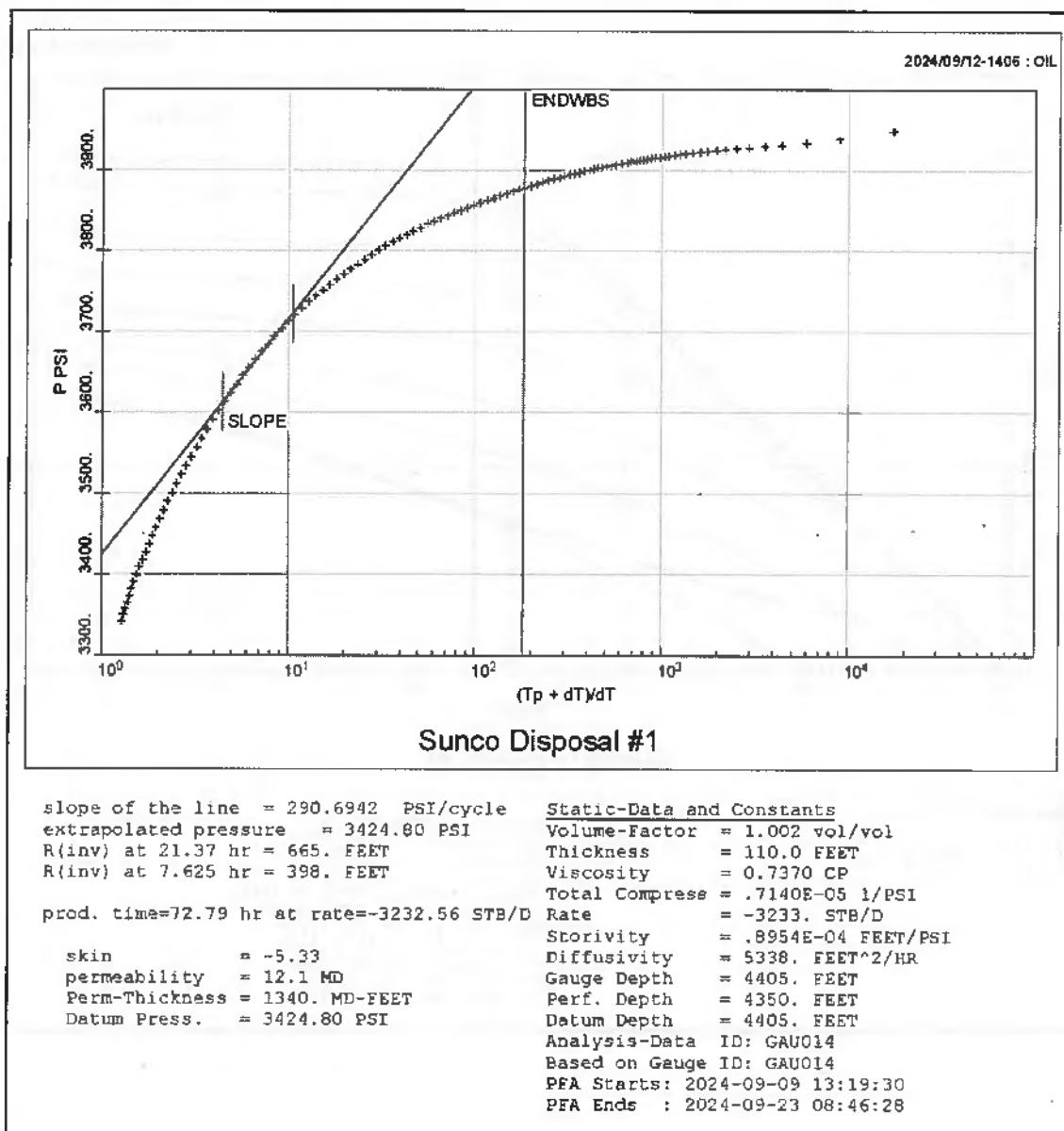




HORNER PLOT:

Conclusions: The stabilized flow period parameters appear reasonable.

- Estimated extrapolated pressure = 3,425 psig
- Estimated K_w (permeability) = 12.1 md
- Estimated skin = -5.33

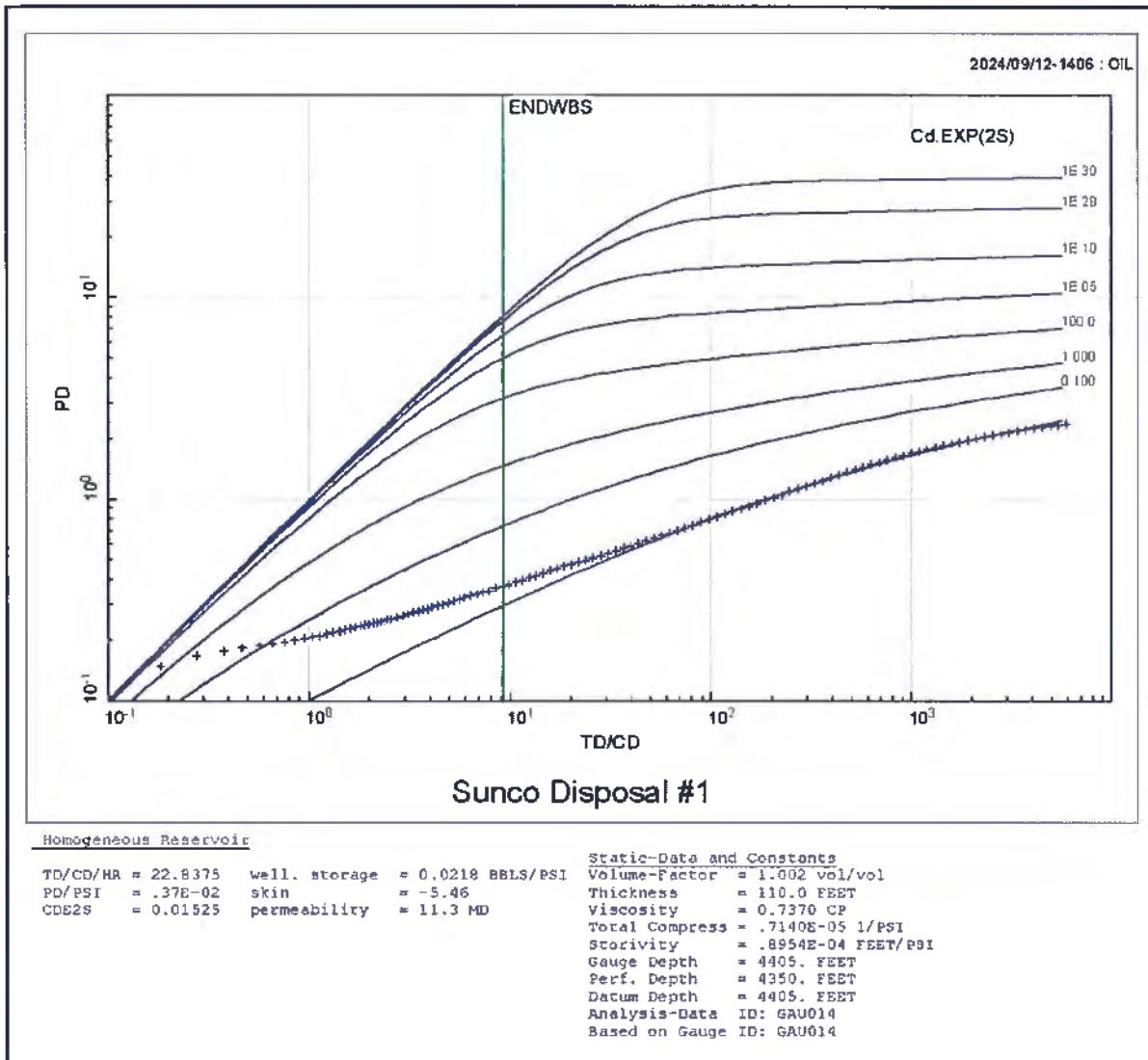


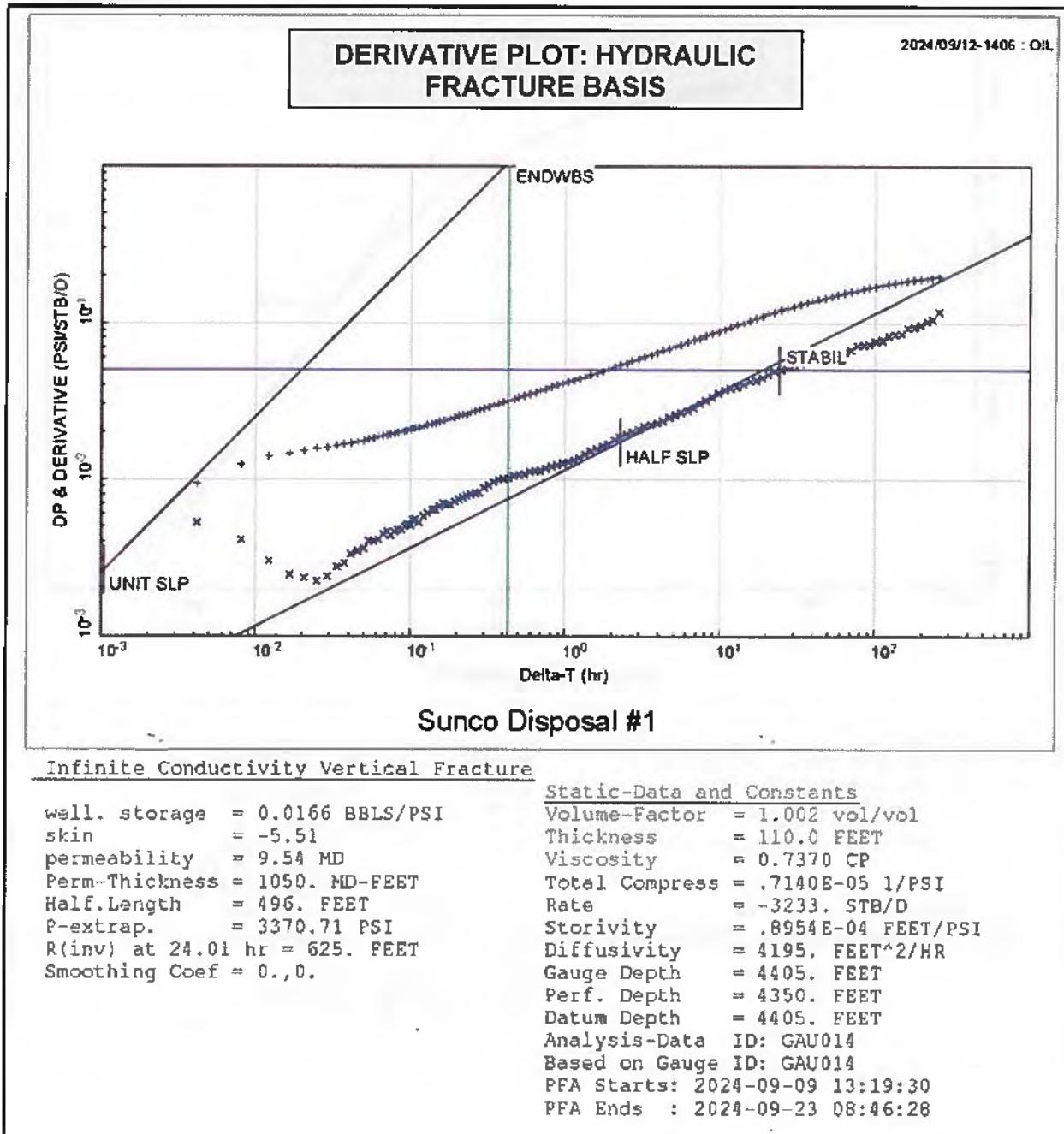


TYPE CURVE PLOT:

Conclusions: The matched type curve parameters appear reasonable.

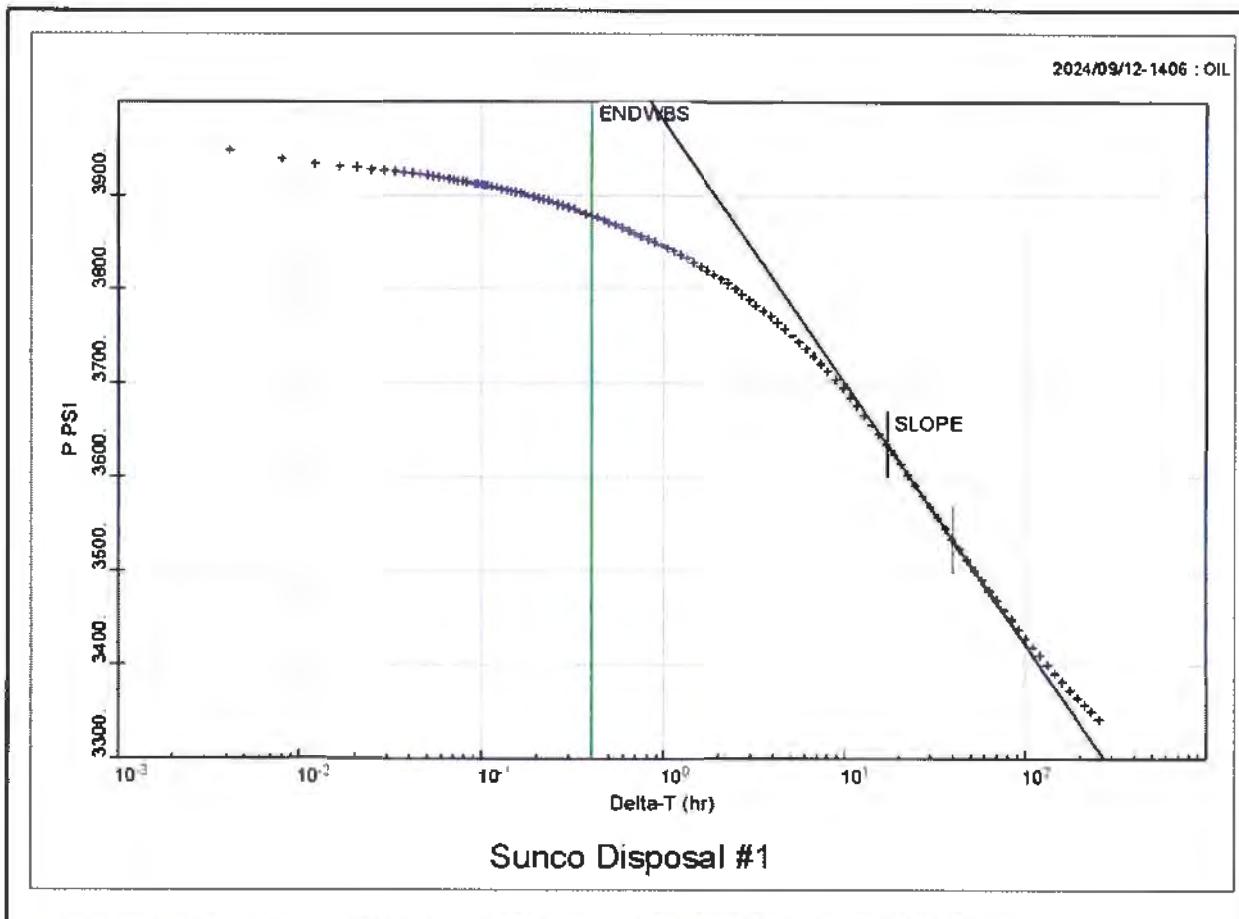
- Estimated K_w (permeability) = 11.3 md
- Estimated skin = -5.46



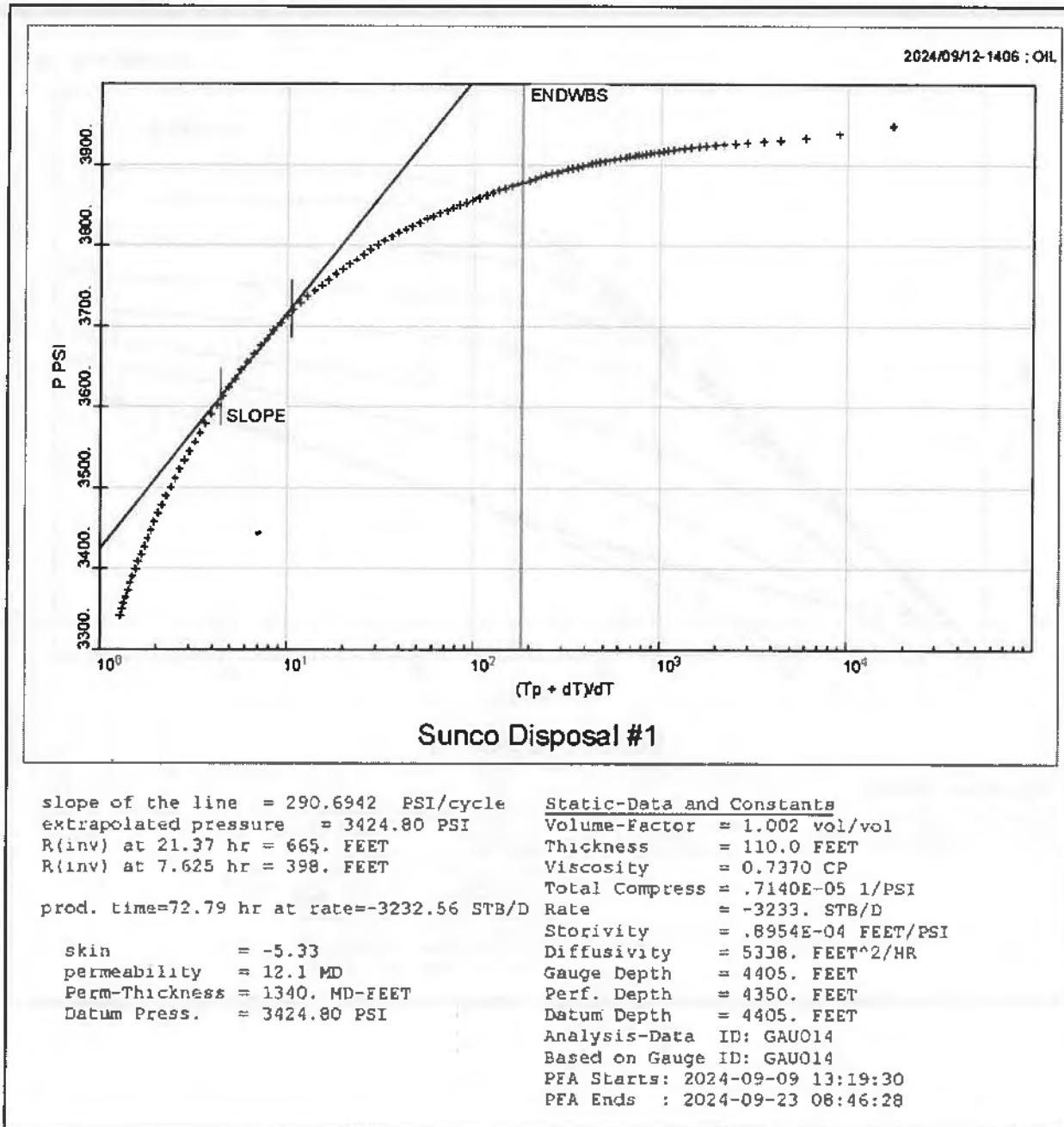
**ENLARGED PLOTS:****DERIVATIVE PLOT:**



MDH PLOT:

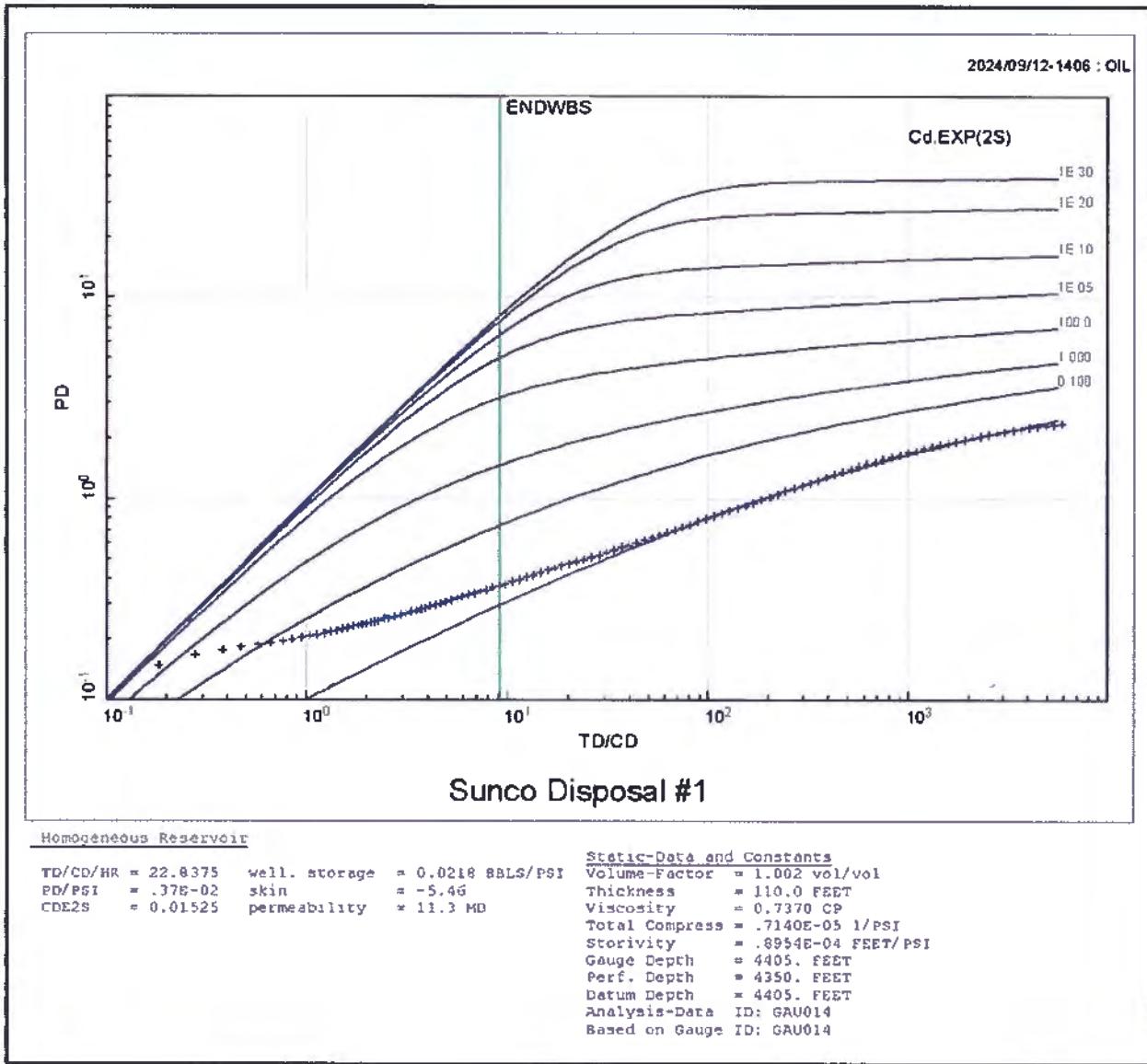


slope of the line = -278.876 PSI/cycle	Static-Data and Constants
extrapolated pressure = 3458.48 PSI	Volume-Factor = 1.002 vol/vol
R(inv) at 17.20 hr = 610. FEET	Thickness = 110.0 FEET
R(inv) at 39.57 hr = 925. FEET	Viscosity = 0.7370 CP
prod. time=72.79 hr at rate=-3232.56 STB/D	Total Compress = .7140E-05 1/PSI
skin = -5.40	Rate = -3233. STB/D
permeability = 12.7 MD	Storivity = .8954E-04 FEET/PSI
Perm-Thickness = 1390. MD-FEET	Diffusivity = 5564. FEET^2/HR
Datum Press. = 3458.48 PSI	Gauge Depth = 4405. FEET
	Perf. Depth = 4350. FEET
	Datum Depth = 4405. FEET
	Analysis-Data ID: GAU014
	Based on Gauge ID: GAU014
	PFA Starts: 2024-09-09 13:19:30
	PFA Ends : 2024-09-23 08:46:28

HORNER PLOT:



TYPE CURVE PLOT:



Results:

Bottom hole pressures were calculated using a gradient of 0.433 psi/foot and FOT results were calculated from the surface data. The results from the Horner, MDH, and Derivative pressure plots are summarized in the Table 1 below. The results for the different methods were consistent and the average calculated properties were:

1. $P^* = 3418 \text{ psi}$
2. $K = 11.4 \text{ md}$
3. $S = -5.4$
4. Radius of Investigation = 1460 feet
5. No indication of boundary

Table 1: Calculated Reservoir Properties Surface Gauges

Calculated Reservoir Parameters - Gauge (Adjusted to BH Datum)					
	Horner Analysis	MDH Plot	Derivative Plot	Type Curve	Average
Estimated K_w (permeability, md)	12.1	12.7	9.5	11.3	11.4
Estimated skin (dimensionless)	-5.3	-5.4	-5.5	-5.5	-5.4
Extrapolated pressure (psig)	3,425	3,458	3,371	--	3,418
Fracture half-length (feet)	--	--	496	--	496
Radius of investigation (feet)	--	1460' at 94 hrs	--	--	--

Comparison with past Falloff Tests:

The results from the 2024 Falloff Test were compiled with the previous 12 RPE and FOT results from the facility and are shown below in **Error! Reference source not found.2**. For results prior to 2008 (only 2007) see previous records.

Table 2: Results Comparison

	<u>2024</u>	<u>2023</u>	<u>2022</u>	<u>2021</u>	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>
Rate (bbl/day)	3232	1695	1684				3292	3150	3132	3340	4500		
P* (psi)	3418	3422	3263	3194*	2968*	2939*	3479	3273	3114	3283	3231	3242	3176
K (md)	11.4	7.5	9.1				10.8	10.4	11.5	15.8	13.6	10.2	20.7
S	-5.4	-5.2	-5.8				-6.0	-6.0	-5.93	-5.97	-7.18	-7.23	-6.79
Radius of Inv (ft)	1460	1440	1960				1690	1790	1430	1580	1450	1250	1750
Frac ½ Length (ft)	496	254	586				598	517	594	467	893	926	596
Boundary	none	none	none				none	none	none	none	648, 1520	755	987

Agua Moss did not conduct tests prior to 2015 and is relying on the 2010 report submitted by Key Energy, the past operator, for those results. The following observations were derived from a comparison of the results:

1. The increased injection volumes over the year may have affected the permeability as it closer matches 2018-2016 when injection volumes were also higher than 2023 and 2022.
 2. The radius of investigation for 2024 is in the range of past test results, although it is smaller than the 2022 radius of 1960'.
- Note: On 2010 results seems peculiar to have a boundary beyond the Radius of Investigation.*
3. The parameters calculated compare well enough with previous FOT parameter to validate the 2024 FOT results.

The raw test data obtain during the 2024 FOT will be kept on file for a period of three (3) years and will be available upon request.

* The pressure shown for 2021 through 2019 is a bottom hole pressure calculated based on surface pressure and a fluid gradient. This pressure is being compared to the extrapolated reservoir pressures from previously completed Falloff Test. The comparison is being used to gauge the current condition of the injection interval to ensure the interval is suitable for continued injection operations.

Conclusions:

Based on the above analysis and results comparison, Agua Moss believes the Sunco SWD #1 2024 FOT was successfully completed. The results do not show indications of concern in continuing the current waste injection operations.

Aqua Moss - Sunco Disposal Operations Log for Fall off Test					
Date	Rate (bbls/day)	TBG Pressure (psig)	CSG Pressure (psig)	Volume Meter (BBLs)	Comment
8/19/2024					Tag fill @ 4435' WLM
8/19/2024					Perform BH test & MIT test
8/23 - 8/28					Rig Work, passed MIT
9/9/24 1:00 PM		1436	0	31698	INSTALL GAUGES
9/9/24 1:30 PM	3224	1790	0		Start injection
9/9/24 2:30 PM	3234	1850	0		
9/9/24 3:30 PM	3243	1880	0		
9/9/24 4:30 PM	3234	1908	0		
9/9/24 5:30 PM	3234	1950	0		
9/9/24 6:30 PM	3234	1950	0		
9/9/24 7:30 PM	3243	1950	0		
9/9/24 8:30 PM	3234	1960	0		
9/9/24 9:30 PM	3234	2000	0		
9/9/24 10:30 PM	3243	2000	0		
9/9/24 11:30 PM	3206	2011	0		
9/10/24 12:30 AM	3206	2019	0		
9/10/24 1:30 AM	3196	2031	0		
9/10/24 2:30 AM	3187	2031	0		
9/10/24 3:30 AM	3196	2039	0		
9/10/24 4:30 AM	3187	2039	0		
9/10/24 5:30 AM	3187	2048	0		
9/10/24 6:30 AM	3187	2054	0		
9/10/24 7:30 AM	3187	2059	0		
9/10/24 8:30 AM	3187	2058	0		
9/10/24 9:30 AM	3168	2060	0		
9/10/24 10:30 AM	3177	2058	0		
9/10/24 11:30 AM	3187	2063	0		
9/10/24 12:30 PM	3196	2067	0		
9/10/24 1:30 PM	3197	20668	0		
9/10/24 2:30 PM	3187	2075	0		
9/10/24 3:30 PM	3186	2071	0		
9/10/24 4:30 PM	3215	2065	0		
9/10/24 5:30 PM	3215	2069	0		
9/10/24 6:30 PM	3215	2074	0		
9/10/24 7:30 PM	3206	2080	0		
9/10/24 8:30 PM	3215	2085	0		
9/10/24 9:30 PM	3234	2088	0		
9/10/24 10:30 PM	3234	2089	0		
9/10/24 11:30 PM	3234	2095	0		
9/11/24 12:30 AM	3234	2095	0		
9/11/24 1:30 AM	3224	2098	0		
9/11/24 2:30 AM	3234	2100	0		
9/11/24 3:30 AM	3215	2102	0		
9/11/24 4:30 AM	3224	2104	0		
9/11/24 5:30 AM	3234	2105	0		
9/11/24 6:30 AM	3234	2107	0		
9/11/24 7:30 AM	3224	2107	0		
9/11/24 8:30 AM	3224	2104	0		
9/11/24 9:30 AM	3234	2104	0		
9/11/24 10:30 AM	3234	2098	0		
9/11/24 11:30 AM	3243	2096	0		
9/11/24 12:30 PM	3258	2099	0		
9/11/24 1:30 PM	3256	2104	0		
9/11/24 2:30 PM	3262	2107	0		
9/11/24 3:30 PM	3263	2106	0		
9/11/24 4:30 PM	3262	2104	0		
9/11/24 5:30 PM	3273	2106	0		
9/11/24 6:30 PM	3262	2104	0		
9/11/24 7:30 PM	3272	2108	0		
9/11/24 8:30 PM	3262	2112	0		
9/11/24 9:30 PM	3262	2115	0		
9/11/24 10:30 PM	3262	2118	0		
9/11/24 11:30 PM	3272	2119	0		
9/12/24 12:30 AM	3272	2121	0		
9/12/24 1:30 AM	3272	2123	0		
9/12/24 2:30 AM	3282	2124	0		
9/12/24 3:30 AM	3262	2125	0		
9/12/24 4:30 AM	3272	2126	0		
9/12/24 5:30 AM	3272	2127	0		
9/12/24 6:30 AM	3272	2129	0		
9/12/24 7:30 AM	3262	2130	0		
9/12/24 8:30 AM	3273	2128	0		
9/12/24 9:30 AM	3262	2133	0		
9/12/24 10:30 AM	3262	2133	0		
9/12/24 11:30 AM	3253	2134	0		
9/12/24 12:30 PM	3254	2133	0		
9/12/24 1:30 PM	3262	2130	0		
9/12/24 2:30 PM	3245	2133	0	41508	Stop injection, start fall off Total BBLs injected:
					9810
9/23/24 8:45 AM	0	1434	0		Stop fall off, pull gauges

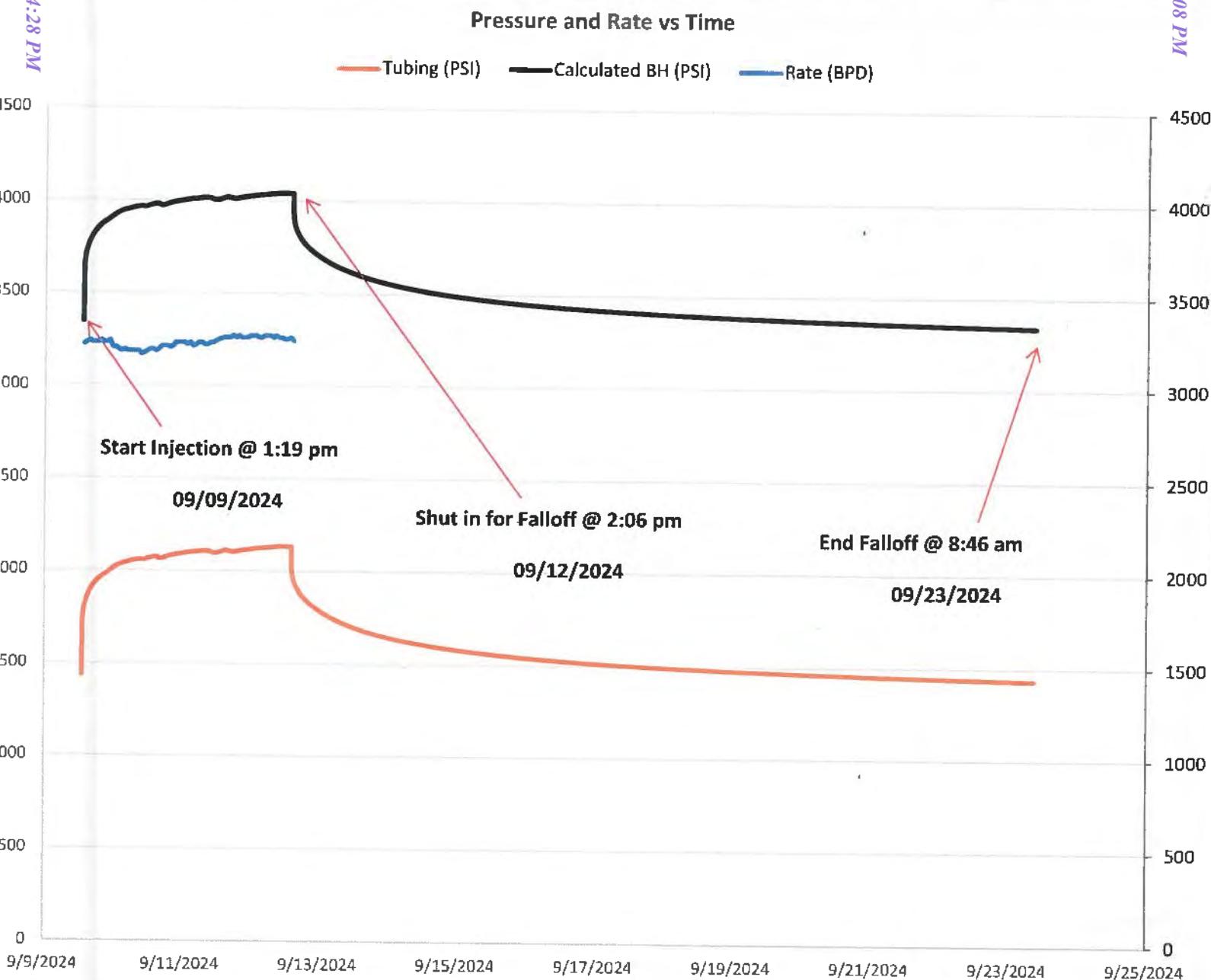


Figure 3 Pressure and Rate vs Time

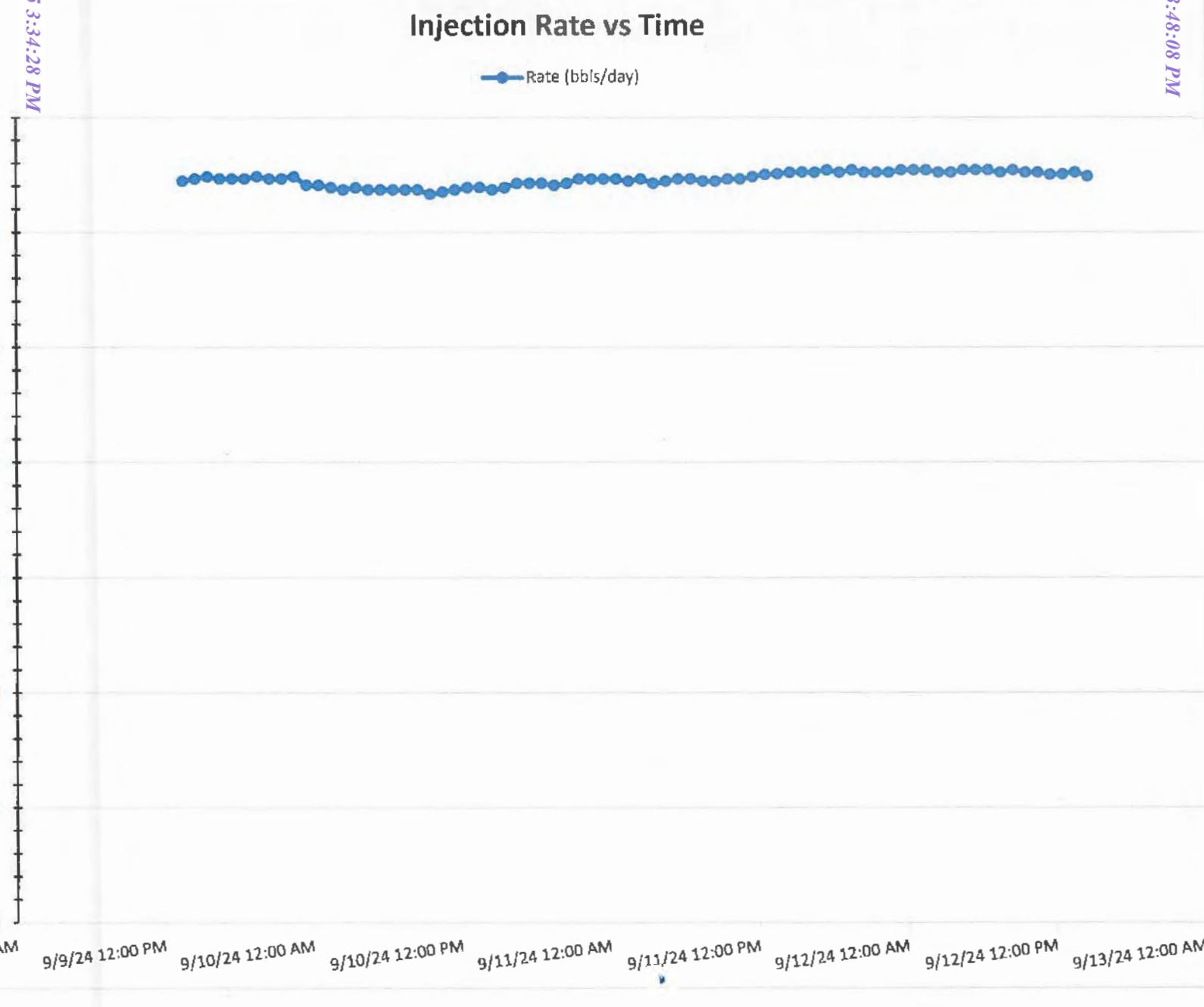


Figure 4 Injection Rate vs Time

Pressure and Rate vs Time During Injection

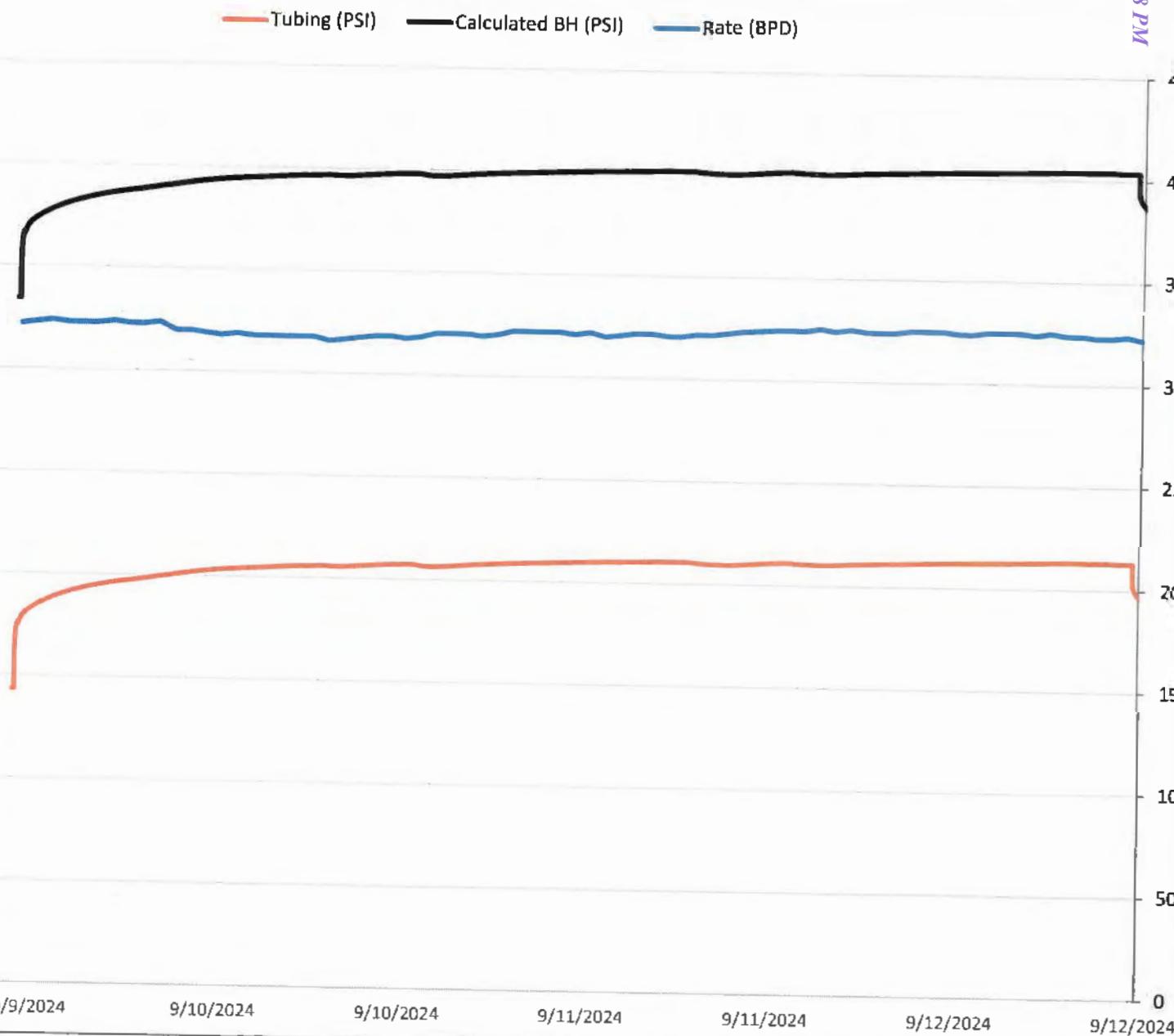
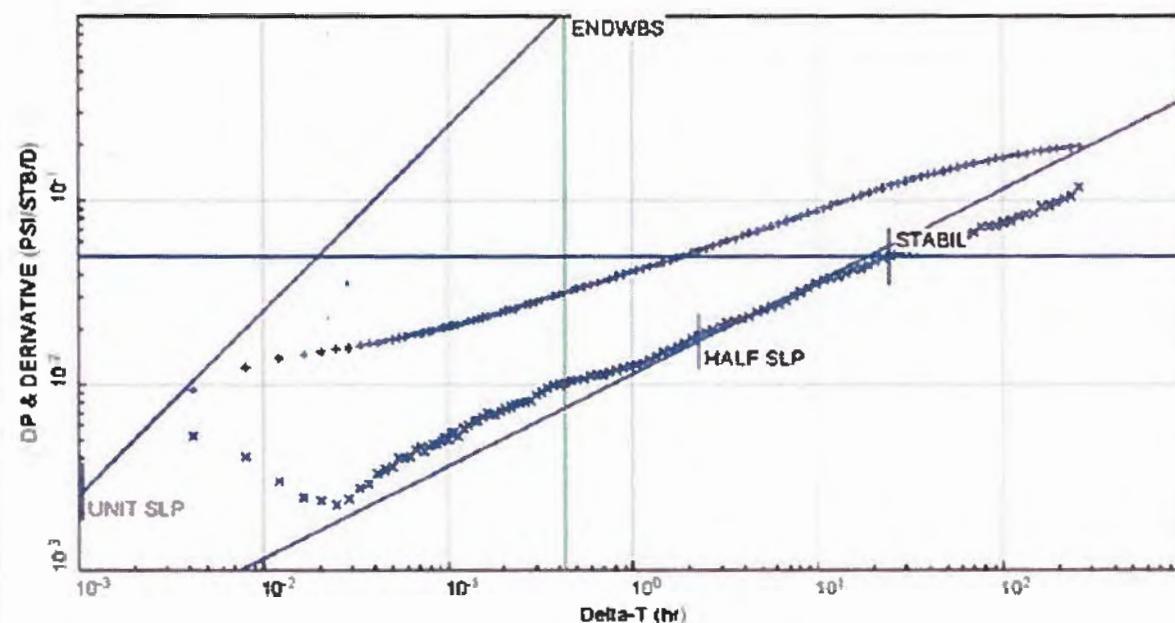


Figure 5 Pressure and Rate vs Time During Injection

DERIVATIVE PLOT: HYDRAULIC FRACTURE BASIS

2024-09-12-1406_01



Sunco Disposal #1

Infinite Conductivity Vertical Fracture

well. storage = 0.0166 BBLS/PSI
skin = -5.51
permeability = 9.54 MD
Perm-Thickness = 1050. MD-FEET
Half.Length = 496. FEET
P-extrap. = 3370.71 PSI
R(inv) at 24.01 hr = 625. FEET
Smoothing Coef = 0.,0.

Static-Data and Constants
Volume-Factor = 1.002 vol/vol
Thickness = 110.0 FBET
Viscosity = 0.7370 CP
Total Compress = .7140E-05 1/PSI
Rate = -3233. STB/D
Storivity = -.8954E-04 FEET/PSI
Diffusivity = 4195. FEET²/HR
Gauge Depth = 4405. FEET
Perf. Depth = 4350. FEET
Datum Depth = 4405. FBET
Analysis-Data ID: GAU014
Based on Gauge ID: GAU014
PFA Starts: 2024-09-09 13:19:30
PFA Ends : 2024-09-23 08:46:28

Figure 6 Derivative Plot

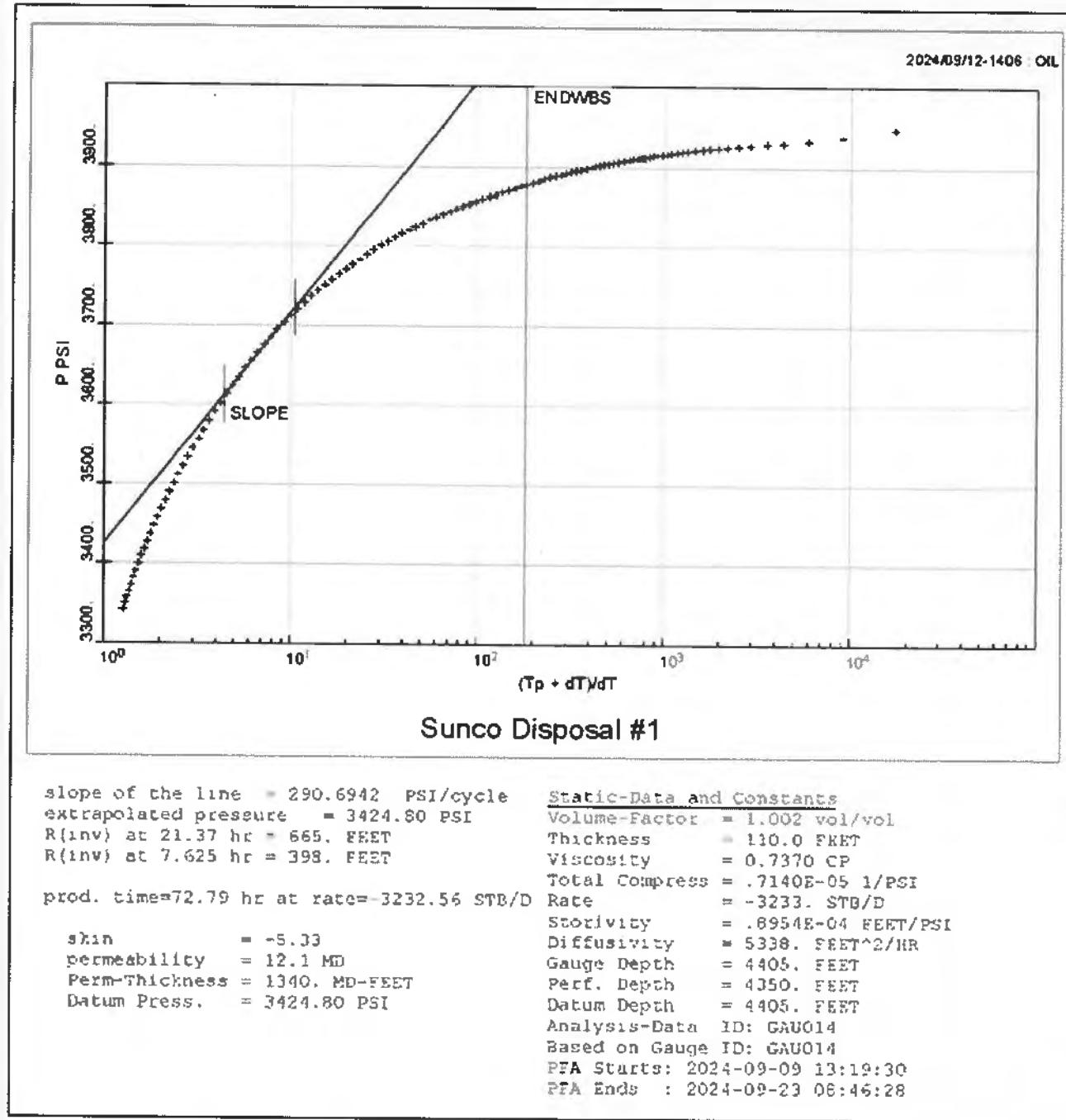


Figure 7 Horner Plot

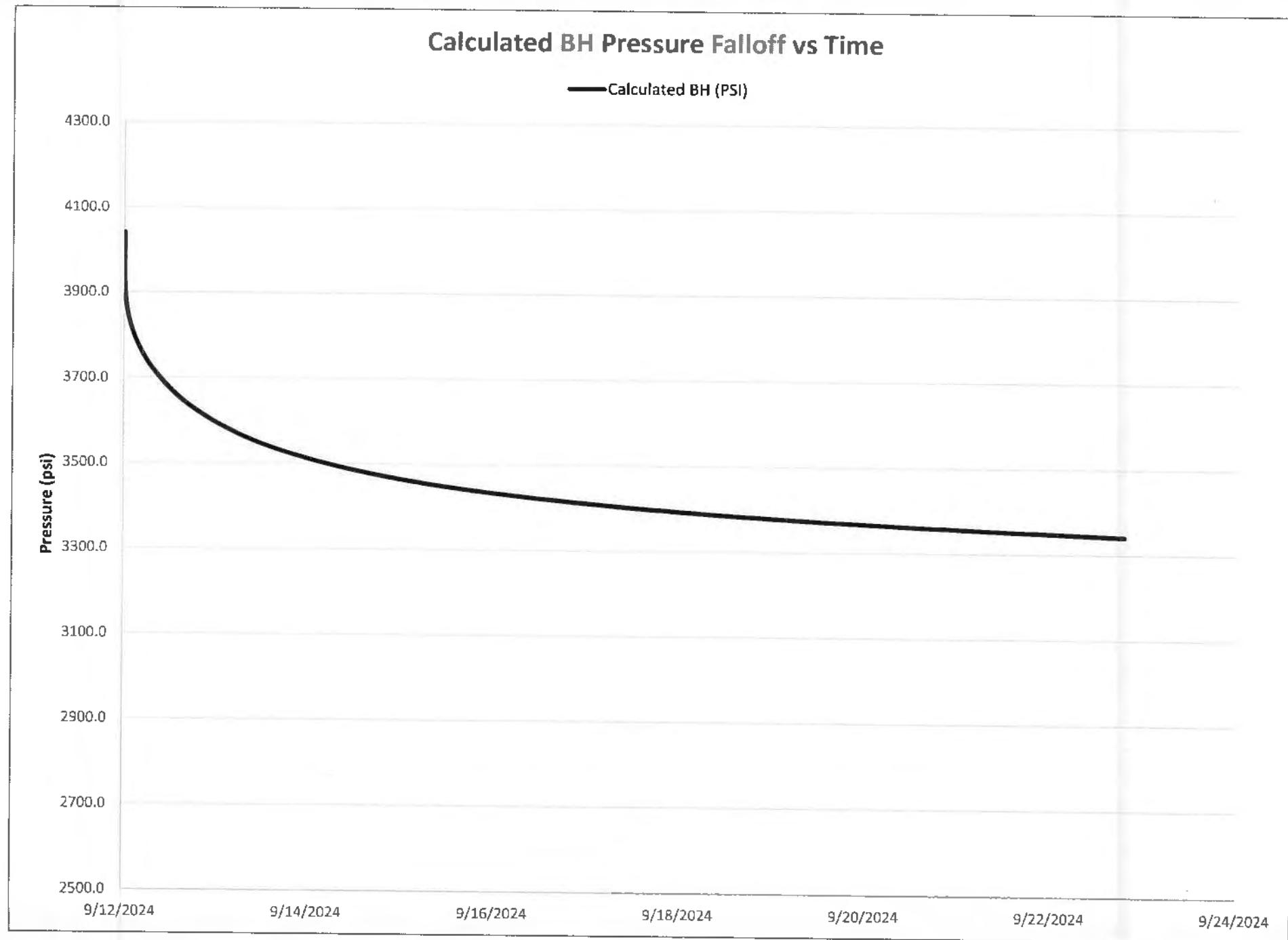


Figure 8 BH Pressure Falloff vs Elapsed Time

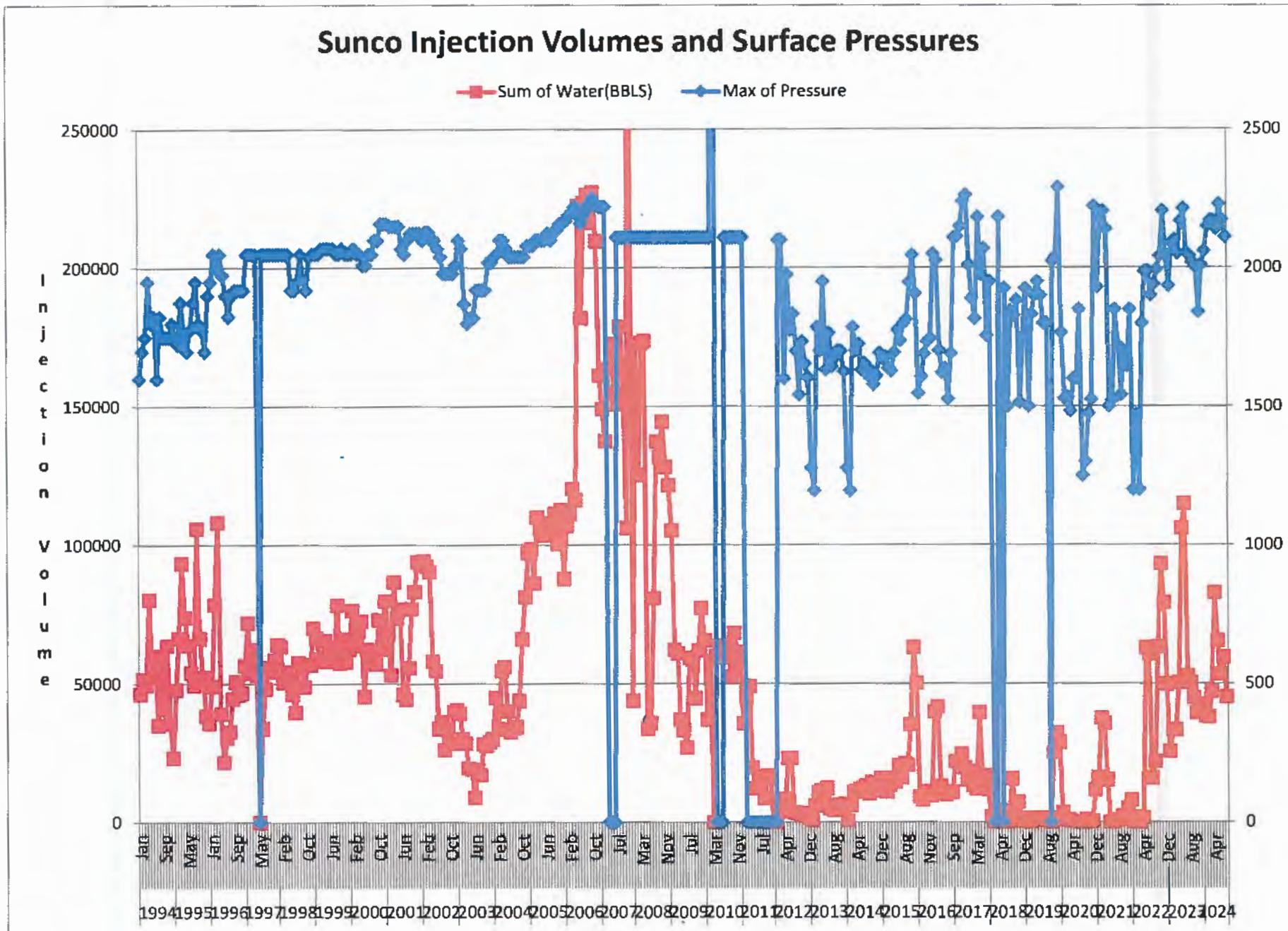
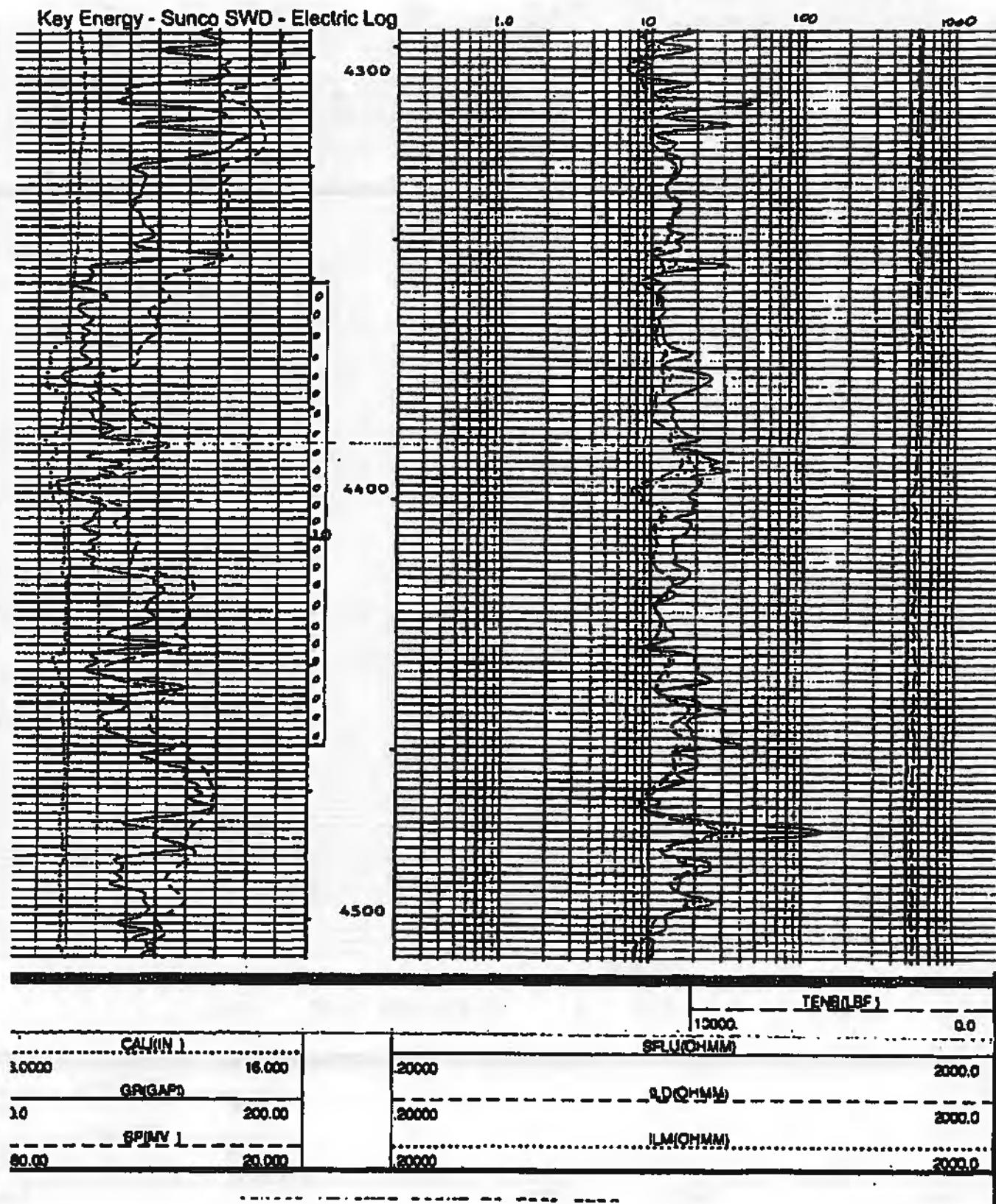
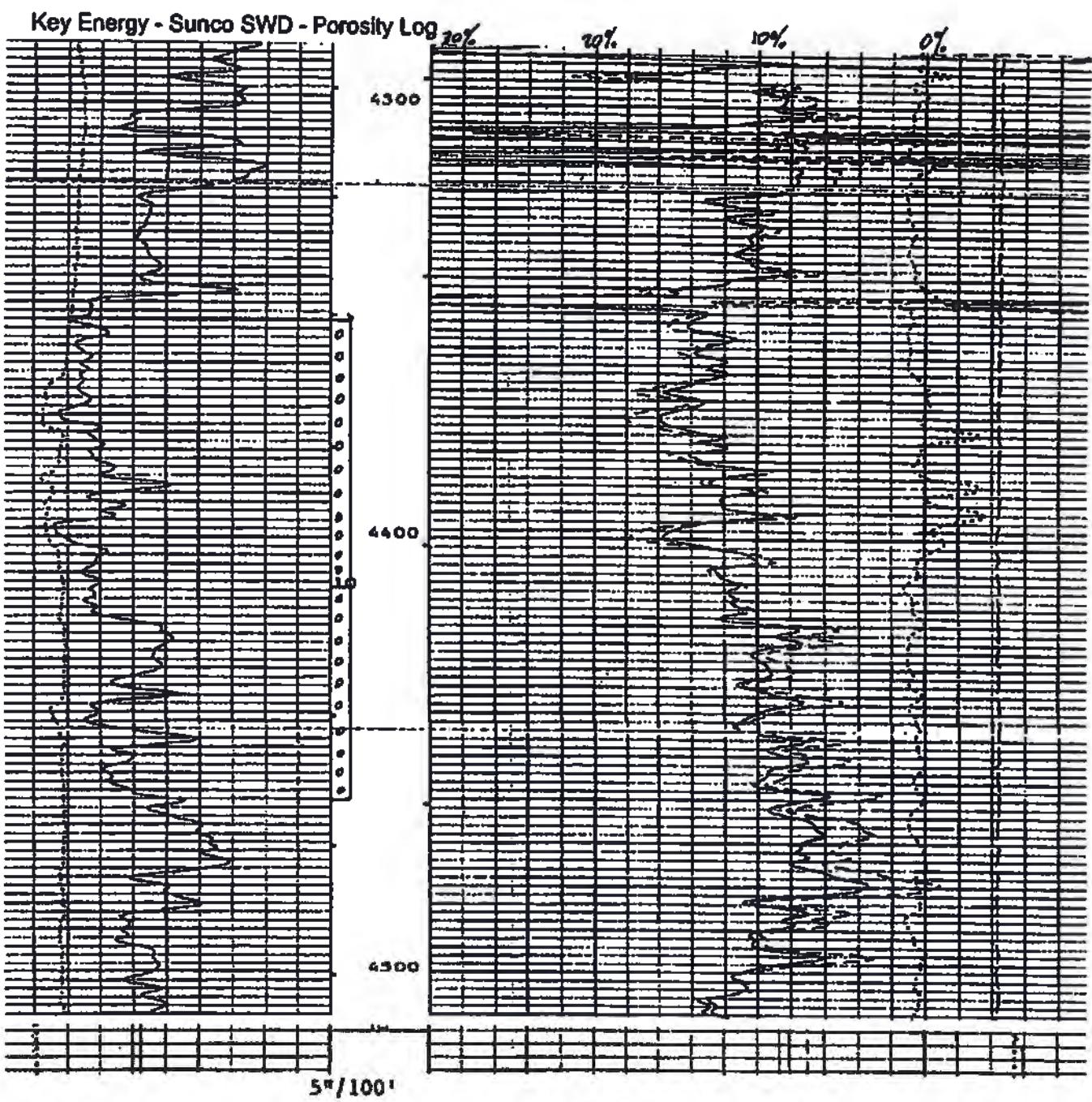


Figure 9 Injection and Pressure Plot





CALIPER		DENSITY		PRESSURE	
8.0000	16.0000	2.0000	3.0000	.2500	25000
GR/GAPI		RHOB(GC3)		TENS(LBF)	
9.0	200.00	30000	-1000	10000	0.0

MESA

MEASUREMENT

Certificate of Calibration

19105

Page 1

Merrion Oil & Gas
610 Reilly Ave.
Farmington, NM 87401

Customer Information

Tech: Dustin Keeler
PO #: CC
Account #: MOG-1100

Instrument Identification

Description: Digital Test Gauge
Manufacture: WIKA
Accuracy: Manufacturer's Specifications

Model: CPG1500-3k
Serial #: 1A02NW0IWJB

Certification Information

Reason For Service: Maintenance of Accuracy
Type Of Calibration: Pneumatic Gauge
As Found Condition: In Tolerance
As Left Condition: Left, As Found
Procedure: 1000898

Technician Remarks: Previous calibration by MESA on 07/31/2023

This instrument has been calibrated using standards with accuracies traceable to the National Institute of Standards and Technology, derived from natural physical constants, derived from ratio measurements, or compared consensus standards.

MESA MEASUREMENT's calibrations as applicable, are performed in compliance with the requirements of ANSI/NCSL Z540-1-1994, ISO 10012-1 & ISO IEC 17025 Quality Standards

The results contained herein relate only to the item calibrated. Calibration due dates appearing on the Certificate of Calibration and label are determined by the client for administrative purposes and do not imply continued conformance to specification.

Calibration Data

Range	0 to 3000 PSIG	Standard	PM600-A20M
Stated Accuracy	+/- 0.1% of Full Scale	Serial No.:	3247007

Step	Reference's Indicated Value	As Found Gauge's Reading	As Left Gauge's Reading	Acceptance Minimum	Limits Maximum
1	0.00	0.0	Left, As Found	-0.2	0.2
2	3000.00	2999.4	Left, As Found	2997.0	3003.0
3	2700.00	2699.6	Left, As Found	2697.0	2703.0
4	2400.00	2399.8	Left, As Found	2397.0	2403.0
5	2100.00	2099.9	Left, As Found	2097.0	2103.0
6	1800.00	1800.0	Left, As Found	1797.0	1803.0
7	1500.00	1500.0	Left, As Found	1497.0	1503.0
8	1200.00	1200.0	Left, As Found	1197.0	1203.0
9	900.00	900.0	Left, As Found	897.0	903.0
10	600.00	600.0	Left, As Found	597.0	603.0
11	300.00	300.0	Left, As Found	297.0	303.0
12	0.00	0.0	Left, As Found	-0.2	0.2
Temp. Reading	72.1°F	73.5°F	Left, As Found		

Technician Remarks: New batteries installed.

MESA

MEASUREMENT

Terrian Oil & Gas
10 Reilly Ave.
Farmington, NM 87401

Certificate of Calibration

19106

Page 1

Customer Information

Tech: Dustin Keeler
PO #: CC
Account #: MOG-1100

Instrument Identification

Description: Digital Test Gauge
Manufacture: WIKA
Accuracy: Manufacture's Specifications

Model: CPG1500-3k
Serial #: 1A02NW0HXJB

Reason For Service: Maintenance of Accuracy

Attested By: 

Type Of Calibration: Pneumatic Gauge

Technician: Steve Olsen

As Found Condition: In Tolerance

Cal Date: 13-Aug-2024

As Left Condition: Left, As Found

Cal Due: 13-Aug-2025

Procedure: 1000898

Temperature: 23 +/- 3.0° C

Technician Remarks: Previous calibration by MESA on 07/31/2023

Relative Humidity: 20% - 60%

This instrument has been calibrated using standards with accuracies traceable to the National Institute of Standards and Technology, derived from natural physical constants derived from ratio measurements, or compared consensus standards.

MESA MEASUREMENT's calibrations, as applicable, are performed in compliance with the requirements of ANSI/NCSL Z340.1-1994, ISO 10012-1 & ISO IEC 17025 Quality Standards.

The results contained herein relate only to the item calibrated. Calibration due dates appearing on the Certificate of Calibration and label are determined by the client for administrative purposes and do not imply continued conformance to specification.

Calibration Data

Range	0 to 3000 PSIG	Standard	PM600-A20M
Stated Accuracy	+/- 0.1% of Full Scale	Serial No.:	3247007

Step	Reference's Indicated Value	As Found Gauge's Reading	As Left Gauge's Reading	Acceptance Minimum	Limits Maximum
1	0.00	0.0	Left, As Found	-0.2	0.2
2	3000.00	2999.7	Left, As Found	2997.0	3003.0
3	2700.00	2699.7	Left, As Found	2697.0	2703.0
4	2400.00	2399.8	Left, As Found	2397.0	2403.0
5	2100.00	2099.8	Left, As Found	2097.0	2103.0
6	1800.00	1799.9	Left, As Found	1797.0	1803.0
7	1500.00	1500.0	Left, As Found	1497.0	1503.0
8	1200.00	1200.1	Left, As Found	1197.0	1203.0
9	900.00	900.2	Left, As Found	897.0	903.0
10	600.00	600.2	Left, As Found	597.0	603.0
11	300.00	300.1	Left, As Found	297.0	303.0
12	0.00	0.0	Left, As Found	-0.2	0.2
Temp. Reading	72.1° F	72.8° F	Left, As Found		

Technician Remarks: New batteries installed.

All tracts within the AOR were reviewed for activity that had ensued since 10/2022.

Since the last AOR 2 wells were plugged and abandoned. P&A reports are attached to this report.

The plugged wells are:

Cornell SRC #7 30-045-08714

Plugged 12/2022

Duff Gas Com #1E 30-045-26141

Plugged 1/2024

2024 AREA OF REVIEW
UNIT LETTERS ENCOMPASSED BY THE 2-MILE AOR

Sec	TWN	RNG	UL	
1	29N	12W	ALL	
2	29N	12W	ALL	
3	29N	12W	ALL	
4	29N	12W	ACFJKNP	
9	29N	12W	ABH	
10	29N	12W	ABCDIJN	
11	29N	12W	ACDGHILOP	
12	29N	12W	AEFKM	
25	30N	12W	EMN	
26	30N	12W	FGLNOP	
27	30N	12W	LMP	
28	30N	12W	O	
33	30N	12W	GHIJK	
34	30N	12W	ALL	
35	30N	12W	ALL	
36	30N	12W	AEIMN	

**Radius expanded to 2 miles for permit renewal
requirements.**

API	Well Name	Well #	Current Operator	Type	Lease	Status	Sec	TWN	RNG	UL	Spud Date	TD	Surface Casing			INT Casing			Production Casing			PLUGGED		
													size	depth	Sacks TOC	size	depth	Sacks TOC	size	depth	Sacks TOC			
30-045-08851	ALLEN A	#001	BP America	Gas	Private	Plugged	1	29N	12W	D	3/12/1961	6785	8.265	264	200 surf				4.5	6785	300 surf	6518-6718		3/27/2018
30-045-26214	ALLEN A	#001E	SIMCOE LLC	Gas	Federal	Active	1	29N	12W	L	3/22/1985	5825	8.625	318	225 surf				5.5	6622	820 surf	6425-6602		
30-045-08661	Dudley Cornell A	#001	SIMCOE LLC	Gas	Federal	Active	1	29N	12W	O	11/15/1960	6730	9.625	263	200 surf				4.5	6707	300 surf	6434-6587		
30-045-24129	Dudley Cornell A	#001E	SIMCOE LLC	Gas	Federal	Active	1	29N	12W	G	4/28/1980	6722	9.625	348	250 surf				4.5	6710	180 surf	6496-6629		
30-045-34348	Allen Com	#100	Burlington	Gas	Federal	Plugged	1	29N	12W	B	10/22/2007	138												1/22/2009
30-045-08782	Cornell	5	Burlington	Gas	Federal	Plugged	1	29N	12W	G	9/30/1955	99999												4/28/1994
30-045-29167	Hike	1	Dugan Production	Gas	Federal	Active	1	29N	12W	G	7/10/1994	3840	8.625	260	175 surf				4.5	3820	595 surf	3710-3718	3710	
30-045-08656	Cornell	2	Energen Resources	Gas	Federal	Plugged	1	29N	12W	M	10/2/1955	1996												9/15/2005
30-045-29539	Cornell	3R	Epic Energy	Gas	Federal	Plugged	1	29N	12W	I	10/7/1955	0	7	131	45-53				3.5	2193	434-741	1991-2041		7/13/2018
30-045-29538	Cornell	5R	HilCorp	Gas	Federal	Active	1	29N	12W	A	4/14/1998	2225	7	131	45-53				3.5	2215	434-741	2029-2059		
30-045-08783	PRE-ONGARD WELL	#001	Pre Ongard	Gas	Private	Plugged	1	29N	12W	F	7/9/2003	2090												12/31/1901
30-045-08641	PRE-ONGARD WELL	#003	Pre Ongard	Gas	Federal	Plugged	1	29N	12W	O	4/11/1998	2203												11/16/1981
30-045-08793	Pre-Ongard		Southern union	Gas	Private	Plugged	1	29N	12W	E	3/16/1948	2125												3/16/1948
30-045-32346	CORNELL	#002R	Southland Royalty	Gas	Federal	Active	1	29N	12W	M	7/22/2004	2152	7	137	90 surf				4.5	2151	310 surf	1702-1926		
30-045-31612	Cornell	2S	Southland Royalty	Gas	Federal	Active	1	29N	12W	O	7/27/1957	0	7	136	56 surf				4.5	2058	225 surf	1725-1921		
30-045-28653	SUNCO DISPOSAL	#001	Agua Moss	Salt Water Disposal	Private	Active	2	29N	12W	E	1/28/1992	4760	8.625	209	150 surf				5.5	4760	1010 surf	4350-4460	4282 10/15/07	4350-4460 TA'd
30-045-33573	CORNELL COM	#500S	Burlington	Gas	Private	Plugged	2	29N	12W	P	3/18/2006	2210	7	132	34 surf	6.25	2210		4.5	2198	279 surf	1754-1939	1743-1924	1/23/2013
30-045-08844	KATTLER	#001	Burlington	Gas	Private	Plugged	2	29N	12W	C	1/26/1945	2069	10	846	surf	5.5	1960		3.5	2050	205 surf	1961-2007		5/26/2012
30-045-08713	McGrath SRC	#001	Burlington	Gas	Private	Plugged	2	29n	12w	j	7/7/1973	2136												1998
30-045-30486	MCGRATH SRC	#001R	Burlington	Gas	Private	Plugged	2	29N	12W	J	3/23/2001	2235												6/25/2010
30-045-32241	BECK	#001R	HilCorp	Gas	Private	Active	2	29N	12W	G	12/1/2004	2225	7	135	34 surf				4.5	2221	262 surf	1774-2077		
30-045-33811	BECK	#001S	HilCorp	Gas	Private	Active	2	29N	12W	D	8/17/2006	2200	7	162	85 surf				4.5	2195	255 surf	1730-1951		
30-045-31580	CORNELL COM	#500	HilCorp	Gas	Federal	Active	2	29N	12W	N	7/14/2003	2136	7	139	44 surf	6.25	2126		4.5	2126	258 surf	1658-1878		

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30-045-08714	CORNELL SRC	#007	HilCorp	Gas	Federal	Active	2	29N	12W	L	7/29/1944	2107	16	42	10 surf	5.5	1978		3.5	2106	250 surf	1976-2010		12/20/2022
30-045-08704	MCGRATH B	#001	HilCorp	Gas	Private	Active	2	29N	12W	J	11/19/1961	6720	8.625	318	225 surf				4.5	1865	1065 surf	6489-6596		
30-045-08839	YOUNG	#001	HilCorp	Gas	Private	Active	2	29N	12W	D	8/1/1961	6740	8.625	307	275 surf				4.5	6739	700 surf	6446-6644		
30-045-08797	Pre-Ongard		Southland	Gas	Private	Plugged	2	29n	12w	g	4/14/1948	2125												2/23/1984
30-045-27635	PRE-ONGARD WELL	#500		Gas	Federal	Plugged	2	29N	12W	M														12/31/1901
30-045-08709	MCGRATH	#003	Burlington	Gas	Private	Plugged	3	29N	12W	J	3/4/1945	2040												3/1/2013
30-045-60274	WALKER 2	#002	Burlington	Gas	Private	Plugged	3	29N	12W	D	1/8/1945	1974												7/24/1998
30-045-08823	Walker SRC	1	Burlington	Gas	Private	Plugged	3	29N	12W	G	2/25/1943	2050												10/12/2009
30-045-33580	MCGRATH	#003S	HilCorp	Gas	Private	TA'd	3	29N	12W	B	7/13/2007	2132	7	218	150 surf				4.5	2112	289 surf	1692-1904		TA'd 10/23/2009
30-045-08712	MCGRATH A	#001	HilCorp	Gas	Private	Active	3	29N	12W	I	3/14/1964	6689	8.625	307	250 surf				4.5	6688	500 surf	6432-6524		
30-045-32931	WALKER	#100S	HilCorp	Gas	Private	Active	3	29N	12W	F	8/14/2005	2120	7	144	61 surf				4.5	2117	238 surf	1621-1885		
30-045-08801	WALKER 1	#001	HilCorp	Gas	Private	Active	3	29N	12W	E	4/12/1960	6620	8.625	232	150 surf				4.5	6620	300 surf	6546-6556		
30-045-30244	WALKER 100	#100	HilCorp	Gas	Private	TA'd	3	29N	12W	L	3/30/2001	1948	7	126	140-168				4.5	1940	219-399	1659-1872	CIBP@1609	Tad
30-045-08711	Pre-Ongard		Union Texas	Gas	Private	Plugged	3	29N	12W	K	6/25/1955	1940												11/10/1964
30-045-29117	RIGGS	#001	Enduring Resources	Gas	Private	Active	4	29N	12W	A	6/24/1994	1900												
30-045-29118	RIGGS	#002	Enduring Resources	Gas	Private	Plugged	4	29N	12W	N	6/28/1994	1890												5/8/2017
30-045-32239	RIGGS	#003	Enduring Resources	Gas	Private	Active	4	29N	12W	C	2/21/2005	1906												
30-045-32312	RIGGS	#004	Enduring Resources	Gas	Private	Active	4	29N	12W	P	3/20/2005	2002												
30-045-08718	STANDARD	#001	HilCorp	Gas	Federal	Active	4	29N	12W	J	11/3/1960	6600	8.625	236	175 surf				4.5	6600	250 surf	6356-6510		
30-045-08720	DEVONIAN FEDERAL	#001	Holcomb Oil & Gas	Gas	Federal	Active	4	29N	12W	K	6/23/1959	6538												
30-045-24552	PRE-ONGARD WELL	#001	Pre Ongard	Gas	Federal	Plugged	4	29N	12W	A	5/29/1981	0												12/7/1995
30-045-08804	FEDERAL	#001	Riggs Oil & Gas	Gas	Federal	Plugged	4	29N	12W	F	5/29/1959	1856												2/9/2017
30-045-08586	FLORANCE GAS COM B	#001	SIMCOE LLC	Gas	Federal	Active	9	29N	12W	H	1/20/1964	6470												
30-045-28824	ROPCO FEE FC 9	#002	HilCorp	Gas	Private	Active	9	29N	12W	A	11/25/1992	1975												
30-045-26855	PRE-ONGARD WELL	#001	Pre Ongard	Gas	Private	Plugged	9	29N	12W	B	3/18/1988	0												3/9/1989

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30-045-22119	PAYNE	#002	Mcelvain Energy	Gas	Federal	Plugged	12	29N	12W	F	7/22/1976	2062		10/30/2010
30-045-22962	PAYNE	#002J	RIM Operating	Gas	Federal	Active	12	29N	12W	E	6/12/1978	2026		
30-045-33015	PRI	#001S	RIM Operating	Gas	Federal	Active	12	29N	12W	A	9/20/2005	2057		
30-045-32665	PRI	#001	RIM Operating	Gas	Federal	Active	12	29N	12W	E	2/17/2005	2090		
30-045-32666	PRI	#002	RIM Operating	Gas	Federal	Active	12	29N	12W	M	2/8/2005	2010		
30-045-09117	PRE-ONGARD WELL	#001	ONGARD WELL OPERATOR	Gas	Private	Plugged	25	30N	12W	M	4/13/1953	0		5/26/1958
30-045-26121	ROWLAND GAS COM	#001E	HilCorp	Gas	Private	Active	25	30N	12W	M	3/19/1985	6560		
30-045-29707	RUBY CORSCOT A	#001	HilCorp	Gas	Private	Active	25	30N	12W	N	9/25/1999	2007		
30-045-31641	RUBY CORSCOT A	#002	HilCorp	Gas	Private	Active	25	30N	12W	E	6/2/2003	2076		
30-045-30456	KATY COM	#002	[14634] MERRION OIL & GAS CORP	Gas	Private	Plugged	26	30N	12W	P	4/27/2001	2028		8/10/2015
30-045-09177	PAUL PALMER	#001	[14634] MERRION OIL & GAS CORP	Gas	Private	Plugged	26	30N	12W	L	9/13/1961	3509		8/14/2015
30-045-29414	PRE-ONGARD WELL	#001	ONGARD WELL OPERATOR	Gas	Private	Plugged	26	30N	12W	G	6/21/1953	0		12/31/1901
30-045-09130	PRE-ONGARD WELL	#003	ONGARD WELL OPERATOR	Gas	Private	Plugged	26	30N	12W	O		0		3/12/1954
30-045-09165	PAUL PALMER D	#001	[5073] CONOCO INC	Gas	Private	Plugged	26	30N	12W	L	10/11/1961	99999		3/17/1995
30-045-30027	PADILLA	#001	HilCorp	Gas	Private	Active	26	30N	12W	F	1/15/2004	1953		
30-045-32243	PADILLA	#002	HilCorp	Gas	Private	Active	26	30N	12W	N	5/13/2004	2153		
30-045-09200	PRE-ONGARD WELL	#001	ONGARD WELL OPERATOR	Gas	Private	Plugged	27	30N	12W	L	3/30/1947	0		3/17/1959
30-045-13120	DUFF GAS COM B	#001	AMERICA PRODUCTION	Gas	Private	Plugged	27	30N	12W	P	2/28/1962	1950		5/30/1996
30-045-30544	DUFF GAS COM	#003	HilCorp	Gas	Private	Active	27	30N	12W	P	4/1/2001	5167		
30-045-09134	DUFF GAS COM C	#001	HilCorp	Gas	Private	Active	27	30N	12W	M	1/30/1964	6365		
30-045-26076	DUFF GAS COM C	#001E	HilCorp	Gas	Private	Active	27	30N	12W	P	9/20/1984	6500		
30-045-29664	DUFF GAS COM C	#002	HilCorp	Gas	Private	Active	27	30N	12W	M	10/16/1998	1856		
30-045-31284	DUFF GAS COM C	#004	HilCorp	Gas	Private	Active	27	30N	12W	P	1/27/2003	1996		
30-045-34235	GILBREATH	#002	Enduring Resources	Gas	Private	Active	28	30N	12W	O	4/30/2008	2170		
30-045-09037	HARGIS	#001	MCGEE OIL & GAS ONSHORE LP	Gas	Private	Plugged	33	30N	12W	G	9/15/1944	1808		2/23/1994

**Quarterly
Injection Report**

	Average Pressure (psig)	Maximum Pressure (psig)	Minimum Pressure (psig)	Average Flow (gpm)	Maximum Flow (gpm)	Minimum Flow (gpm)	Average Annular Pressure (psig)	Maximum Annular Pressure (psig)	Minimum Annular Pressure (psig)	Average Volume (bpd)	Maximum Volume (bpd)	Minimum Volume (bpd)	Volume (barrels)	Total Cumulative Volume (barrels)
														Previous year
Jan-2024	1793.478	1950	1500	48.66648551	73.87916667	8.42916667	0	0	0	1668.565217	2533	289	38377	15182756
Feb-2024	1763.095	1950	1550	52.75416667	67.025	34.475	0	0	0	1808.714286	2298	1182	37983	15221133
Mar-2024	2171.429	2250	1950	65.43611111	101.0041667	33.2208333	0	0	0	2243.52381	3463	1139	47114	15259116
														Previous Quarter
Apr-2024	2170.37	2250	1900	89.32237654	130.2583333	4.43333333	0	0	0	3062.481481	4466	152	82687	15306230
May-2024	2090.741	2250	1800	70.68811728	111.5916667	3.12083333	0	0	0	2423.592593	3826	107	65437	15388917
Jun-2024	2120.833	2300	1950	67.85815217	105.9041667	19.5708333	0	0	0	2326.565217	3631	671	53511	15454354
														Previous Quarter
Jul-24	2133.846	2300	1800	66.70192308	108.2666667	1.95416667	0	0	0	2286.923077	3712	67	59460	15567325
Aug-24	2265	2350	2100	88.9525	135.9166667	21.875	0	0	0	3049.8	4660	750	45747	15613072
Sep-24	2021	2250	1600	46.68125	94.79166667	17.2666667	0	0	0	1600.5	3250	592	16005	15629077
														Previous Quarter
Oct-2024	#DIV/0!	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	15629077
Nov-2024	#DIV/0!	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	15629077
Dec-2024	#DIV/0!	0	0	0	0	0	0	0	0	#DIV/0!	0	0	0	15629077
														Total for year 446321
														16075398 Life Of well injected

Total Injected	Avg Vol	Avg Flow	Avg Vol	Avg Flow	Avg Vol	Avg Flow	Avg Vol	Avg Flow	Avg Vol	Avg Flow	Avg Vol	Avg Flow	Avg Vol	Avg Flow	Avg Vol	Avg Flow	Avg Vol	Avg Flow	Avg Vol	Avg Flow	Avg Vol	Avg Flow	Avg Vol	Avg Flow		
1/1/24	289	8.429166667	2/1/24	1840	53.66666667	3/1/24	1800	52.5	4/1/2024	1846	53.84166667	5/1/2024	3727	108.70416667	6/1/2024				7/1/2024	1922	56.05833333	8/1/2024	2875	83.85416667	9/1/2024	
1/2/24	1470	42.875	2/2/24	1408	41.06666667	3/2/24			4/2/2024	2837	82.74583333	5/2/2024	2805	81.8125	6/2/2024				7/2/2024	2031	59.2375	8/2/2024	3737	108.9958333	9/2/2024	
1/3/24	2061	60.1125	2/3/24			3/3/24			4/3/2024	2402	70.05833333	5/3/2024	2275	66.35416667	6/3/2024	1876	54.71666667	7/4/2024	1070	31.20833333	8/4/2024			9/4/2024		
1/4/24	1160	33.83333333	2/4/24			3/4/24	1938	56.525	4/4/2024	2378	69.35833333	5/4/2024	107	3.12083333	6/4/2024	3277	95.57916667	7/5/2024	2876	83.88333333	8/5/2024	1791	52.2375	9/5/2024		
1/5/24	1671	48.7375	2/5/24	1948	56.81666667	3/5/24	2116	61.71666667	4/5/2024	3403	99.25416667	5/5/2024	821	23.94583333	6/5/2024	3248	94.73333333	7/6/2024	924	26.95	8/6/2024	3670	107.0416667	9/6/2024		
1/6/24			2/6/24	1907	55.62083333	3/6/24	1950	56.875	4/6/2024			5/6/2024	1739	50.72083333	6/7/2024	2328	67.9	7/7/2024			8/7/2024	4110	119.875	9/7/2024		
1/7/24			2/7/24	1849	53.92916667	3/7/24	1974	57.575	4/7/2024			5/7/2024	2627	76.62083333	6/8/2024			7/8/2024	2159	62.97083333	8/8/2024	4466	130.2583333	9/8/2024		
1/8/24	1567	45.70416667	2/8/24	1977	57.6625	3/8/24	1139	33.22083333	4/8/2024	2919	85.1375	5/8/2024	2923	85.25416667	6/9/2024			7/9/2024	1710	49.875	8/9/2024	4338	126.525	9/9/2024	1440 42	
1/9/24	1025	29.89583333	2/9/24	1182	34.475	3/9/24			4/9/2024	4448	129.7333333	5/9/2024	3165	92.3125	6/10/2024	1072	31.26666667	7/10/2024	1931	56.32083333	8/10/2024	1039	30.30416667	9/10/2024	3197 93.24583333	
1/10/24	2228	64.98333333	2/10/24			3/10/24			4/10/2024	4160	121.3333333	5/10/2024	2781	81.1125	6/11/2024	2073	60.4625	7/11/2024	3366	98.175	8/11/2024			9/11/2024	3250 94.79166667	
1/11/24	1722	50.225	2/11/24			3/11/24	1906	55.59166667	4/11/2024	3587	104.6208333	5/11/2024	248	7.23333333	6/12/2024	3151	91.90416667	7/12/2024	3100	90.41666667	8/12/2024	2696	78.63333333	9/12/2024	945 27.5625	
1/12/24	2533	73.87916667	2/12/24	1292	37.68333333	3/12/24	2138	62.35833333	4/12/2024	4453	129.87916667	5/13/2024	4121	120.19583333	6/14/2024	890	25.95833333	7/14/2024	3631	105.90416667	8/14/2024	3638	106.1083333	9/14/2024		
1/13/24			2/13/24	1710	49.875	3/13/24	2732	79.68333333	4/14/2024			5/15/2024	2652	77.35	6/15/2024	671	19.57083333	7/15/2024	1490	43.45833333	8/15/2024	4660	135.9166667	9/15/2024		
1/14/24			2/14/24	1798	52.44166667	3/14/24	2602	75.89166667	4/16/2024	4466	130.2583333	5/16/2024	3298	96.19166667	6/16/2024			7/16/2024	3127	91.20416667	8/16/2024	3702	107.975	9/16/2024		
1/15/24	2246	65.50833333	2/15/24	2020	58.91666667	3/15/24	2161	63.02916667	4/17/2024	4446	129.675	5/17/2024	2953	86.12916667	6/17/2024	1427	41.62083333	7/17/2024	3159	92.1375	8/17/2024	750	21.875	9/17/2024		
1/16/24	1580	46.08333333	2/16/24	2150	62.70833333	3/16/24			4/18/2024	4406	128.5083333	5/18/2024	624	18.2	6/18/2024	2497	72.82916667	7/18/2024	3182	92.80833333	8/18/2024			9/18/2024		
1/17/24	1224	35.7	2/17/24			3/17/24			4/19/2024	4416	128.8	5/19/2024			6/19/2024	2821	82.27916667	7/19/2024	2020	58.91666667	8/19/2024			9/19/2024		
1/18/24	2226	64.925	2/18/24			3/18/24	2300	67.08333333	4/20/2024	1992	58.1	5/20/2024	2700	78.75	6/20/2024	2472	72.1	7/20/2024	67	1.954166667	8/20/2024			9/20/2024		
1/19/24	2381	69.44583333	2/19/24	1755	51.1875	3/19/24	2141	62.44583333	4/21/2024			5/21/2024	3552	103.6	6/21/2024	2445	71.3125	7/21/2024			8/21/2024			9/21/2024		
1/20/24			2/20/24	1889	55.09583333	3/20/24	2898	84.525	4/22/2024	2487	72.5375	5/22/2024	3632	105.9333333	6/22/2024	1166	34.00833333	7/22/2024	1682	49.05833333	8/22/2024			9/22/2024		
1/21/24			2/21/24	1814	52.90833333	3/21/24	2685	78.3125	4/23/2024	3648	106.4	5/23/2024	2143	62.50416667	6/23/2024			7/23/2024	3164	92.28333333	8/23/2024			9/23/2024	1874 54.65833333	
1/22/24	1622	47.30833333	2/22/24	1415	41.27083333	3/22/24	2025	59.0625	4/24/2024	3082	89.89166667	5/24/2024	2552	74.43333333	6/24/2024	1419	41.3875	7/24/2024	3712	108.26666667	8/24/2024			9/24/2024	861 25.1125	
1/23/24	1657	48.32916667	2/23/24	2189	63.84583333	3/23/24			4/25/2024	2968	86.56666667	5/25/2024	333	9.7125	6/25/2024	1958	57.10833333	7/25/2024	3237	94.4125	8/25/2024			9/25/2024	1112 32.43333333	
1/24/24	1123	32.75416667	2/24/24			3/24/24			4/26/2024	3426	99.925	5/26/2024			6/26/2024	2800	81.66666667	7/26/2024	2594	75.65833333	8/26/2024			9/26/2024	1650 48.125	
1/25/24	871	25.40416667	2/25/24			3/25/24	2560	74.66666667	4/27/2024	152	4.43333333	5/27/2024	1807	52.70416667	6/27/2024	3237	94.4125	7/27/2024			8/27/2024			9/27/2024	1084 31.61666667	
1/26/24	2513	73.29583333	2/26/24	2298	67.025	3/26/24	3463	101.00416667	4/28/2024			5/28/2024	3051	88.9875	6/28/2024	3296	96.13333333	7/28/2024			8/28/2024			9/28/2024		
1/27/24			2/27/24	1612	47.01666667	3/27/24	2519	73.47083333	4/29/2024			5/29/2024	2313	67.4625	6/29/2024	1184	34.53333333	7/29/2024	2845	82.97916667	8/29/2024			9/29/2024		
1/28/24			2/28/24	1899	55.3875	3/28/24	1931	56.32083333	4/30/2024			5/30/2024	1833	53.4625	6/30/2024			7/30/2024	3260	95.08333333	8/30/2024			9/30/2024	592 17.26666667	
1/29/24	1445	42.14583333	2/29/24	2031	59.2375	3/29/24	2136	62.3	4/31/2024			5/31/2024	2491	72.65416667	6/31/2024				2993	87.29583333	7/31/2024					
1/30/24	1797	52.4125				3/30/24																				
1/31/24	1966	57.34166667				3/31/24																				

	WH	AP	
1/1/24	1500	0	
1/2/24	1550	0	
1/3/24	1900	0	
1/4/24	1900	0	
1/5/24	1650	0	
1/6/24			
1/7/24			
1/8/24	1550	0	
1/9/24	1650	0	
1/10/24	1900	0	
1/11/24	1950	0	
1/12/24	1950	0	
1/13/24			
1/14/24			
1/15/24	1550	0	
1/16/24	1900	0	
1/17/24	1900	0	
1/18/24	1900	0	
1/19/24	1950	0	
1/20/24			
1/21/24			
1/22/24	1600	0	
1/23/24	1950	0	
1/24/24	1950	0	
1/25/24	1650	0	
1/26/24	1950	0	
1/27/24			
1/28/24			
1/29/24	1550	0	
1/30/24	1950	0	
1/31/24	1950	0	
	1793.478	0	AVG
	1500	0	MIN
	1950	0	MAX

	WH	AP	
2/1/24	1950	0	
2/2/24	1950	0	
2/3/24			
2/4/24			
2/5/24	1550	0	
2/6/24	1950	0	
2/7/24	1950	0	
2/8/24	1700	0	
2/9/24	1950	0	
2/10/24			
2/11/24			
2/12/24	1575	0	
2/13/24	1950	0	
2/14/24	1950	0	
2/15/24	1700	0	
2/16/24	1750	0	
2/17/24			
2/18/24			
2/19/24	1600	0	
2/20/24	1700	0	
2/21/24	1700	0	
2/22/24	1750	0	
2/23/24	1700	0	
2/24/24			
2/25/24			
2/26/24	1600	0	
2/27/24	1650	0	
2/28/24	1700	0	
2/29/24	1700	0	
2/30/24			
2/31/24			
	2171.429	0	AVG
	1550	0	MIN
	1950	0	MAX

	WH	AP	
3/1/24	2250	0	
3/2/24			
3/3/24			
3/4/24	2250	0	
3/5/24	2250	0	
3/6/24	2250	0	
3/7/24	2250	0	
3/8/24	2100	0	
3/9/24			
3/10/24			
3/11/24	2250	0	
3/12/24	2250	0	
3/13/24	2250	0	
3/14/24	2000	0	
3/15/24	2250	0	
3/16/24			
3/17/24			
3/18/24	1950	0	
3/19/24	2050	0	
3/20/24	2250	0	
3/21/24	2250	0	
3/22/24	1950	0	
3/23/24			
3/24/24			
3/25/24	2250	0	
3/26/24	2050	0	
3/27/24	2250	0	
3/28/24	2250	0	
3/29/24	2000	0	
3/30/24			
3/31/24			
	2170.37	0	AVG
	1900	0	MIN
	2250	0	MAX

	WH	AP	
4/1/24	2150	0	
4/2/24	2250	0	
4/3/24	2250	0	
4/4/24	2000	0	
4/5/24	2250	0	
4/6/24	1900	0	
4/7/24			
4/8/24	2250	0	
4/9/24	2250	0	
4/10/24	2250	0	
4/11/24	2250	0	
4/12/24	2250	0	
4/13/24	2250	0	
4/14/24	1950	0	
4/15/24	2250	0	
4/16/24	2250	0	
4/17/24	2250	0	
4/18/24	1850	0	
4/19/24	2250	0	
4/20/24	2250	0	
4/21/24	2250	0	
4/22/24	2100	0	
4/23/24	2000	0	
4/24/24	2100	0	
4/25/24	1950	0	
4/26/24	2100	0	
4/27/24	1950	0	
4/28/24	2250	0	
4/29/24	2100	0	
4/30/24	2250	0	
4/31/24	2250	0	
	2090.741	0	AVG
	1800	0	MIN
	2250	0	MAX

	WH	AP	
5/1/24	2250	0	
5/2/24	2050	0	
5/3/24	2250	0	
5/4/24	1800	0	
5/5/24	2100	0	
5/6/24	2100	0	
5/7/24	2250	0	
5/8/24	2250	0	
5/9/24	2250	0	
5/10/24	2000	0	
5/11/24	1800	0	
5/12/24	2100	0	
5/13/24	1950	0	
5/14/24	2100	0	
5/15/24	2250	0	
5/16/24	2100	0	
5/17/24	2250	0	
5/18/24	1850	0	
5/19/24	2250	0	
5/20/24	2100	0	
5/21/24	2250	0	
5/22/24	2100	0	
5/23/24	1950	0	
5/24/24	2100	0	
5/25/24	1850	0	
5/26/24	2000	0	
5/27/24	1950	0	
5/28/24	2250	0	
5/29/24	2100	0	
5/30/24	2250	0	
5/31/24	2250	0	
	2120.833	0	AVG
	1950	0	MIN
	2300	0	MAX

	WH	AP	
6/1/24	2250	0	
6/2/24	1800	0	
6/3/24	1950	0	
6/4/24	2250	0	
6/5/24	2100	0	
6/6/24	2000	0	
6/7/24	2250	0	
6/8/24			
6/9/24			
6/10/24	1950	0	
6/11/24	2100	0	
6/12/24	2250	0	
6/13/24	2100	0	
6/14/24	2300	0	
6/15/24	2300	0	
6/16/24	2100	0	
6/17/24	2250	0	
6/18/24	2150	0	
6/19/24	2000	0	
6/20/24	2100	0	
6/21/24	2000	0	
6/22/24	2300	0	
6/23/24	2300	0	
6/24/24	1950	0	
6/25/24	2000	0	
6/26/24	2150	0	
6/27/24	2150	0	
6/28/24	2300	0	
6/29/24	2300	0	
6/30/24			
	2133.846	0	AVG
	1800	0	MIN
	2300	0	MAX

	WH	AP	
7/1/24	2150	0	
7/2/24	1800	0	
7/3/24	1850	0	
7/4/24	1930	0	
7/5/24	2150	0	
7/6/24	2150	0	
7/7/24			
7/8/24	2150	0	
7/9/24	2150	0	
7/10/24	2175	0	
7/11/24	2250	0	
7/12/24	2250	0	
7/13/24	2300	0	
7/14/24			
7/15/24	2200	0	
7/16/24	2250	0	
7/17/24	2250	0	
7/18/24	2250	0	
7/19/24	2050	0	
7/20/24	1850	0	
7/21/24	2000	0	
7/22/24	2050	0	
7/23/24	2300	0	
7/24/24	2150	0	
7/25/24	2150	0	
7/26/24	2150	0	
7/27/24	2150	0	
7/28/24	2300	0	
7/29/24	2250	0	
7/30/24	2125	0	
7/31/24	2150	0	
	2265	0	AVG
	2100	0	MIN
	2350	0	MAX

	WH	AP	
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NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD

AZTEC NM 87410

(505) 334-6178 FAX: (505) 334-6170

<http://emnrd.state.nm.us/ocd/District%203district.htm>

BRADENHEAD TEST REPORT

(submit 1 copy to above address)

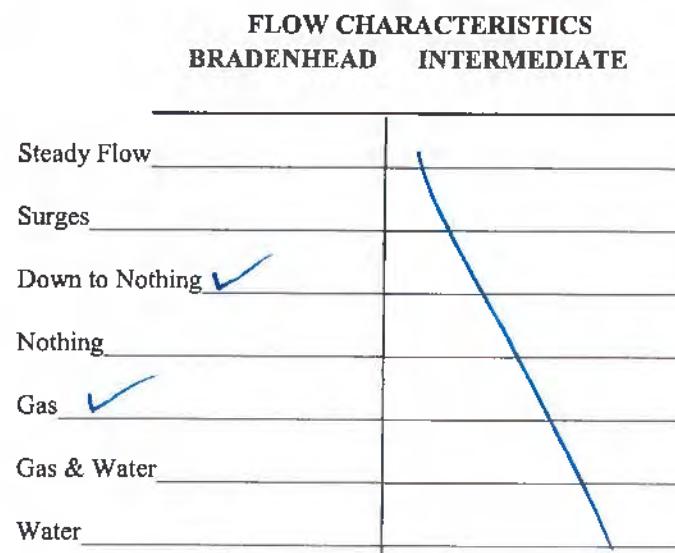
Date of Test 8/19/24 Operator Aqua Moss API #30-045-28653

Property Name Sunco Disposal Well No. 1 Location: Unit E Section 02 Township 29N Range 12W

Well Status(Shut-In or Producing) Initial PSI: Tubing 1700 Intermediate N/A Casing 340 Bradenhead 0

OPEN BRADENHEAD AND INTERMEDIATE TO ATMOSPHERE INDIVIDUALLY FOR 15 MINUTES EACH

Testing	PRESSURE			FLOW CHARACTERISTICS		
	BH	Bradenhead	INTERM	BRADENHEAD	INTERMEDIATE	
TIME		Int	Csg	Int	Csg	
5 min	0	.	340			
10 min	0		340			
15 min	0		340			
20 min						
25 min						
30 min						



If bradenhead flowed water, check all of the descriptions that apply below:

CLEAR FRESH SALTY SULFUR BLACK

5 MINUTE SHUT-IN PRESSURE

BRADENHEAD 0INTERMEDIATE N/A

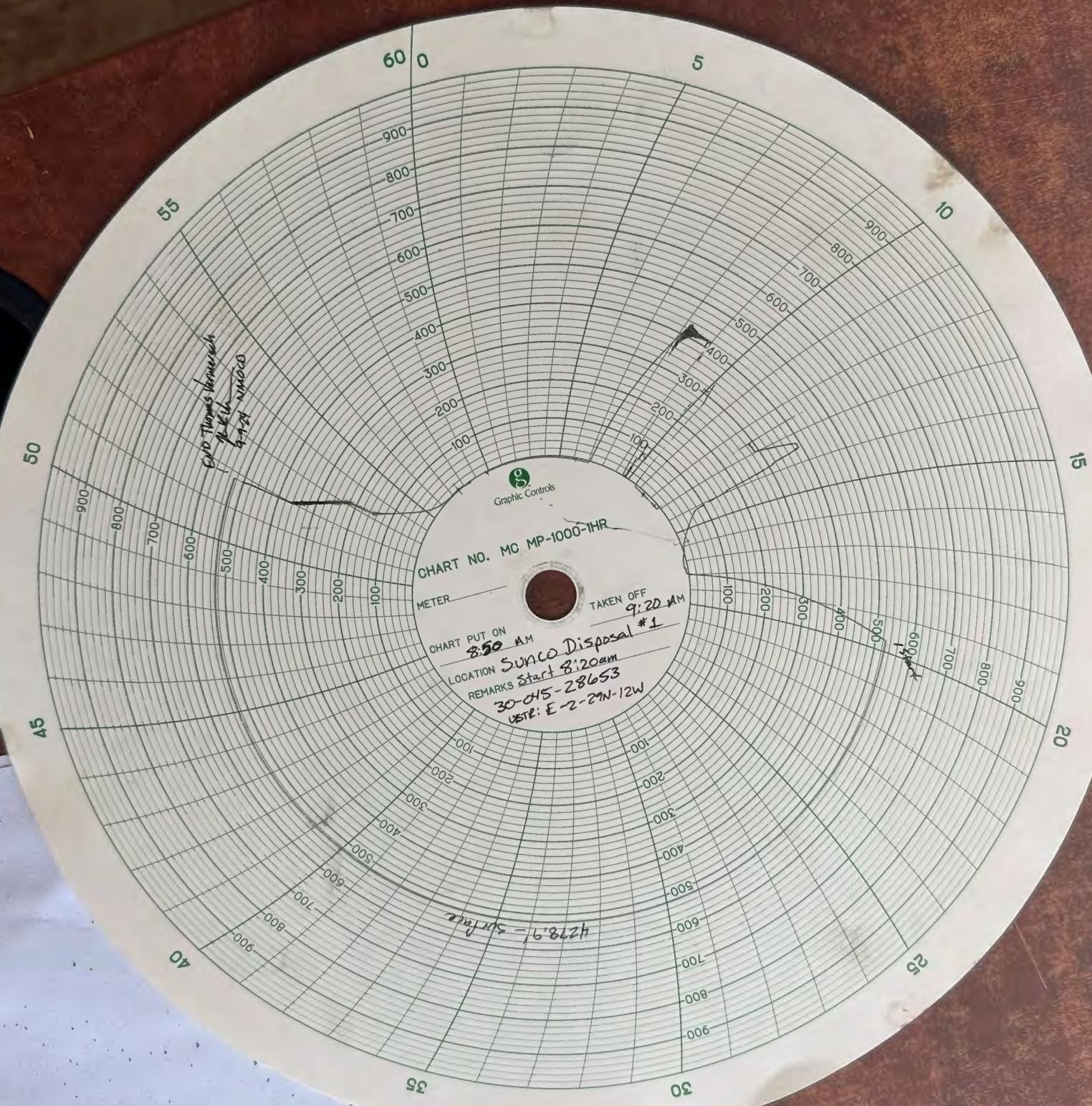
REMARKS:

Zero on gauge, small ^{puff} when opened. nothing through test. 5 min shut in =

By William H. Edwards
Foreman
(Position)

Witness

E-mail address _____



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

COMMENTS

Action 397589

COMMENTS

Operator: AGUA MOSS, LLC P.O. Box 600 Farmington, NM 87499	OGRID: 247130
	Action Number: 397589
	Action Type: [UF-DP] Discharge Permit (DISCHARGE PERMIT)

COMMENTS

Created By	Comment	Comment Date
cchavez	Based on the FOT Report, OCD deems the FOT to be acceptable for the following reasons: a. Adequate injection rate to stress injection interval; b. Steady-state injection flow rate (~ 3.3% variation) was achieved prior to FOT monitoring; c. Instantaneous shut-in observed was observed before FOT monitoring; d. FOT monitoring ?P greatly exceeded 100 psi (i.e., 700 psi); and e. FOT radial flow condition appears to have been achieved with a model indicative of the presence of fractures/faults. The derivative pressure continued inclination also indicates a boundary condition(s).	5/28/2025

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

CONDITIONS

Action 397589

CONDITIONS

Operator: AGUA MOSS, LLC P.O. Box 600 Farmington, NM 87499	OGRID: 247130
	Action Number: 397589
	Action Type: [UF-DP] Discharge Permit (DISCHARGE PERMIT)

CONDITIONS

Created By	Condition	Condition Date
cchavez	Conditions of approval: 1) A Hall Plot shall be included in future FOT reports to document the permeability of the well and/or assess the need for well cleaning and stimulation; 2) O&M of the well should include a well cleaning and reservoir stimulation at a frequency determined from a Hall Plot and/or FOT skin results from a successful FOT. 3) Chart type redundancy shall be minimized in future FOTs. 4) Chart scales shall be correctly plotted, displayed and discernible in future FOTs, i.e., injection rate of ~ 93 gpm did not match plot depicted in chart. Some plots lacked scales. 5) Complete digital data (1 second interval) shall be provided with future FOT reports. OCD is evaluating an E-Permitting upload process to receive digital data in spreadsheet/database formats for upload into pressure transient software for log-log model verification. 6) Installation of a bottom hole gauge prior to performing a FOT is required.	5/28/2025