



15-135-24597

20-165-23w

DIAMOND TESTING

P.O. Box 157

HOISINGTON, KANSAS 67544

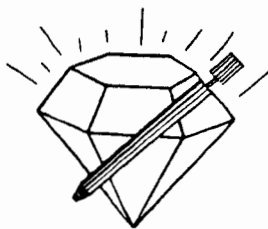
(620) 653-7550 • (800) 542-7313

STC 21098.D364

Page 1 of 3 Pages

Company Grand Mesa Operating Company Lease & Well No. Sargent No. 2-20
Elevation 2487KB Formation Cherokee Sand Effective Pay -- Ft. Ticket No. 2246
Date 1-12-07 Sec. 20 Twp. 16S Range 23W County Ness State Kansas
Test Approved By Kevin Kessler Diamond Representative Roger D. Friedly
Formation Test No. 1 Interval Tested from 4,395 ft. to 4,465 ft. Total Depth 4,465 ft.
Packer Depth 4,390 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.
Packer Depth 4,395 ft. Size 6 3/4 in. Packer Depth -- ft. Size -- in.
Depth of Selective Zone Set -- ft.
Top Recorder Depth (Inside) 4,376 ft. Recorder Number 21098 Cap. 5,000 psi
Bottom Recorder Depth (Outside) 4,462 ft. Recorder Number 13387 Cap. 4,000 psi
Below Straddle Recorder Depth -- ft. Recorder Number -- Cap. -- psi
Drilling Contractor WW Drilling, LLC - Rig 6 Drill Collar Length 118 ft. I.D. 2 1/4 in.
Mud Type Chemical Viscosity 52 Weight Pipe Length -- ft. I.D. -- in.
Weight 9.4 Water Loss 8.0 cc. Drill Pipe Length 4,245 ft. I.D. 3 1/2 in.
Chlorides 1,900 P.P.M. Test Tool Length 32 ft. Tool Size 3 1/2 - IF in.
Jars: Make Bowen Serial Number No. 1 Anchor Length 38' perf. w/ 32' drill pipe Size 4 1/2 - FH in.
Did Well Flow? No Reversed Out No Surface Choke Size 1 in. Bottom Choke Size 5/8 in.
Main Hole Size 7 7/8 in. Tool Joint Size 4 1/2 - XH in.
Blow: 1st Open: Good, 4 in., blow increasing. Off bottom of bucket in 2 mins. Weak surface blow during shut-in.
2nd Open: Good, 4 in., blow increasing. Off bottom of bucket in 2 1/2 mins. No blow back during shut-in.
Recovered 217 ft. of gas & oil cut watery mud = 3.081400 bbls. (Grind out: 2%-gas; 4%-oil; 14%-water; 80%-mud)
Recovered 186 ft. of gas & oil cut watery mud = 2.641200 bbls. (Grind out: 4%-gas; 4%-oil; 22%-water; 70%-mud)
Recovered 372 ft. of gas & oil cut muddy water = 5.282400 bbls. (Grind out: 5%-gas; 8%-oil; 17%-mud; 70%-water)
Recovered 428 ft. of slightly oil cut muddy water = 4.982560 bbls. (Grind out: 2%-oil; 5%-mud; 93%-water)
Recovered 1,203 ft. of TOTAL FLUID = 15.987560 bbls.
Remarks Tool Sample Grind Out: 2%-mud; 22%-water; 76%-oil

Time Set Packer(s) 2:19 A.M. ~~RXX~~ Time Started Off Bottom 5:07 A.M. ~~RXX~~ Maximum Temperature 126°
Initial Hydrostatic Pressure (A) 2136 P.S.I.
Initial Flow Period Minutes 3 (B) 87 P.S.I. to (C) 139 P.S.I.
Initial Closed In Period Minutes 30 (D) 1265 P.S.I.
Final Flow Period Minutes 45 (E) 159 P.S.I. to (F) 552 P.S.I.
Final Closed In Period Minutes 90 (G) 1249 P.S.I.
Final Hydrostatic Pressure (H) 2128 P.S.I.



DIAMOND TESTING
P. O. Box 157
HOISINGTON, KANSAS 67544
(800) 542-7313

Page 2 of 3 Pages

FLUID SAMPLE DATA

Company Grand Mesa Operating
Lease & Well No. Sargent No. 2-20
Date 1-12-07 Sec. 20 Twp. 16 S Range 23 W
Formation Test No. 1 Interval Tested From 4,395 ft. to 4,465 ft. Total Depth 4,465 ft.
Formation Cherokee Sand

	<u>MUD PIT</u>	<u>RECOVERY</u>	<u>RECOVERY</u>
Viscosity	<u>52</u> CP	<u>--</u> CP	
Weight	<u>9.4</u>	<u>--</u>	
Water Loss	<u>8.0</u> CC	<u>--</u> CC	
PH Factor	<u>10.0</u>	<u>--</u>	<u>Water</u> <u>7.0</u>

	<u>RESISTIVITY</u>	<u>CHLORIDE</u> <u>CONTENT</u>
Recovery Water	<u>.40</u> @ <u>60</u> °F.	<u>19,000</u> ppm
Recovery Mud	<u>--</u> @ <u>--</u> °F.	<u>--</u> ppm
Recovery Mud Filtrate	<u>--</u> @ <u>--</u> °F.	<u>--</u> ppm
Mud Pit Sample	<u>1.70</u> @ <u>52</u> °F.	<u>4,900</u> ppm
Mud Pit Sample Filtrate	<u>1.80</u> @ <u>64</u> °F.	<u>3,200</u> ppm

Sample Taken By ROGER D. FRIEDLY

Witness By KEVIN KESSLER

Remarks Pit filtrate triton dish chlorides were 1,900 Ppm
Recovery water dish chlorides were 18,000 Ppm

GENERAL INFORMATION

Client Information:

Company: Grand Mesa

Contact: Larry Friend

Phone: Fax: e-mail:

Site Information:

Contact: Kevin Kessler

Phone: Fax: e-mail:

Well Information:

Name: SARGENT #2-20

Operator: GRAND MESA

Location-Downhole: DST #1 CHEROKEE SAND 4,395' - 4,465'

Location-Surface: SEC 20-15S-22W NESS COUNTY

Test Information:

Company: DIAMOND TESTING

Representative: ROGER D. FRIEDLY

Supervisor: KEVIN KESSLER

Test Type: CONVENTIONAL

Job Number:

Test Unit: NO. 1

Start Date: 2007/01/11

Start Time: 23:30:00

End Date: 2007/01/12

End Time: 08:29:00

Report Date:

Prepared By:

Remarks:

Qualified By:

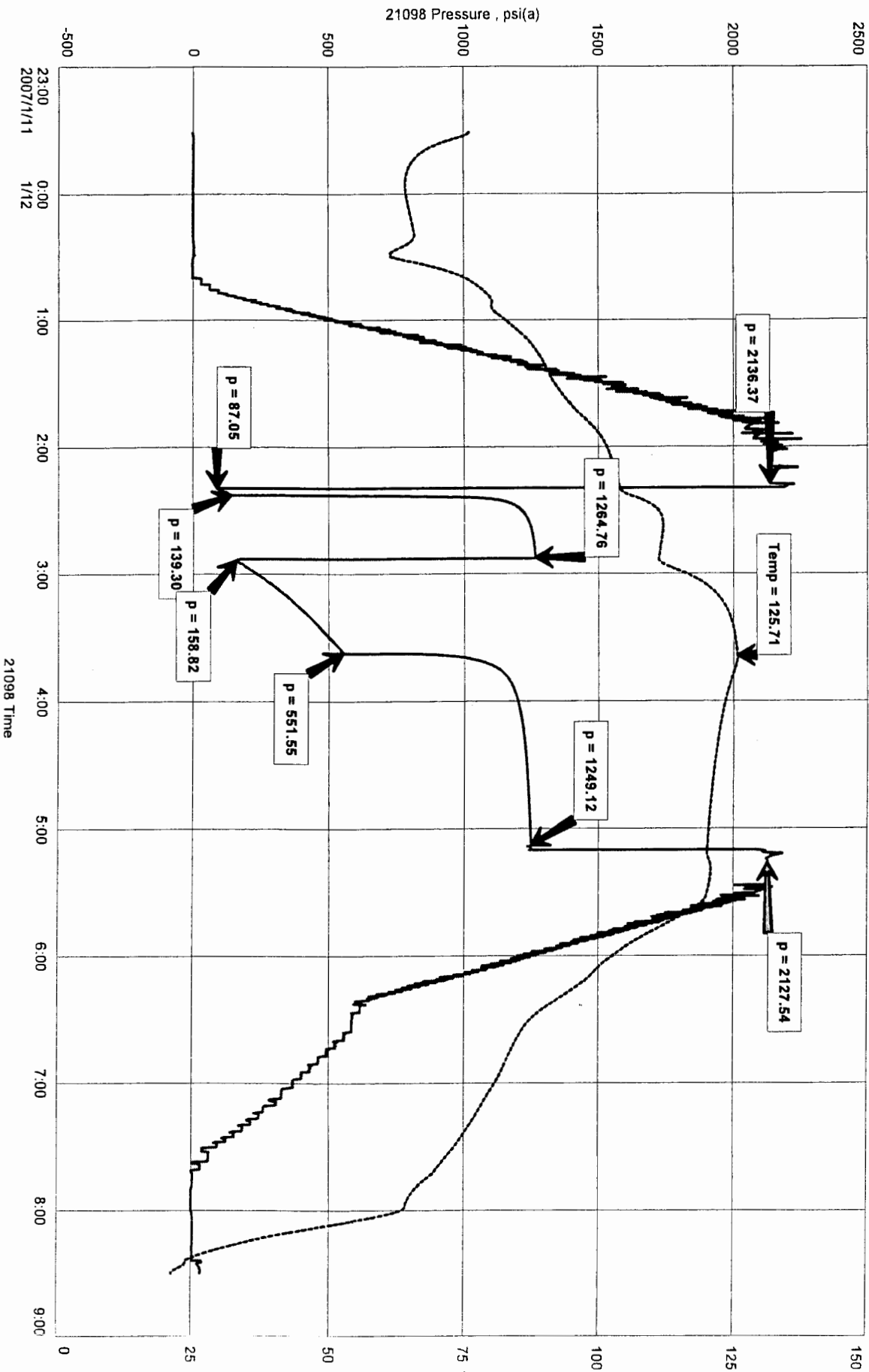
RECOVERED: 217' G&OCWM 2% GAS, 4% OIL, 14% WTR, 80% MUD
186' G&OCWM 4% GAS, 4% OIL, 18% WTR, 70% MUD
372' G&OCMW 5% GAS, 8% OIL, 17% MUD, 70% WTR
428' SLYOCMW 2% OIL, 5% MUD, 93% WTR
1,203' TOTAL FLUID

TOOL SAMPLE: 2% MUD, 20% WTR, 76% OIL

Grand Mesa
DST #1 CHEROKEE SAND 4,395' - 4,465'
Start Test Date: 2007/01/11
Final Test Date: 2007/01/12

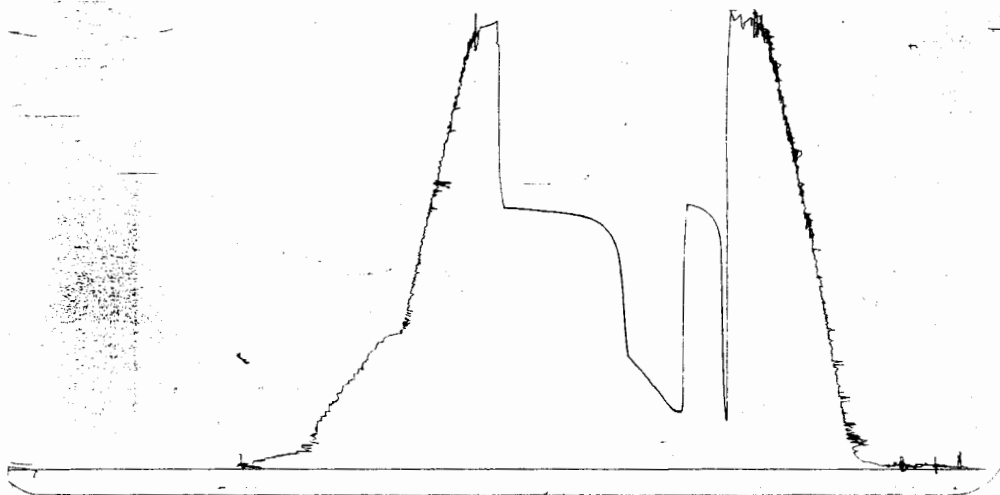
SARGENT #2-;
Formation: DST #1 CHEROKEE SAND 4,395' - 4,46
Pool: WILDC/

SARGENT #2-20



DST #1 outside 1550'
Cherokee

4378-4460
Loc 4462



This is an actual photograph of recorder chart.

POINT	PRESSURE Elec.	
	Field Reading	Office Reading
(A) Initial Hydrostatic Mud	2136	2136
(B) First Initial Flow Pressure.....	87	87
(C) First Final Flow Pressure	139	139
(D) Initial Closed-in Pressure	1265	1265
(E) Second Initial Flow Pressure	159	159
(F) Second Final Flow Pressure.....	552	552
(G) Final Closed-in Pressure.....	1249	1249
(H) Final Hydrostatic Mud	2128	2128