Confidentiality Requested:
☐ Yes ☐ No

KANSAS CORPORATION COMMISSION
OIL & GAS CONSERVATION DIVISION

1108937

Form ACO-1
August 2013
Form must be Typed
Form must be Signed
All blanks must be Filled

WELL COMPLETION FORM
WELL HISTORY - DESCRIPTION OF WELL & LEASE

OPERATOR: License # 9855
Name: Grand Mesa Operating Company
Address 1: 1700 N WATERFRONT PKWY BLDG 600
Address 2:
City: WICHITA State: KS Zip: 67206 + 5514
Contact Person: Ronald N. Sinclair
Phone: (316) 265-3000
CONTRACTOR: License # 30606
Name: Murfin Drilling Co., Inc.
Wellsite Geologist: John Goldsmith
Purchaser: NCRA

Designate Type of Completion:

☑ New Well ☐ Re-Entry ☐ Workover

☑ Oil ☐ WSW ☐ SWD ☐ SIOW
☐ Gas ☐ D&A ☐ ENHR ☐ SIGW
☐ OG ☐ GSW ☐ Temp. Abd.
☐ CM *(Coal Bed Methane)*
☐ Cathodic ☐ Other *(Core, Expl., etc.)*:

If Workover/Re-entry: Old Well Info as follows:

Operator:
Well Name:
Original Comp. Date: Original Total Depth:

☐ Deepening ☐ Re-perf. ☐ Conv. to ENHR ☐ Conv. to SWD
☐ Plug Back ☐ Conv. to GSW ☐ Conv. to Producer

☐ Commingled Permit #:
☐ Dual Completion Permit #:
☐ SWD Permit #:
☐ ENHR Permit #:
☐ GSW Permit #:

11/13/2012	11/23/2012	01/04/2013
Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date

API No. 15 - 15-063-22033-00-00
Spot Description:
SE - SE - SE - NW Sec. 14 Twp. 13 S. R. 31 ☐ East ☑ West
2488 Feet from ☑ North / ☐ South Line of Section
2471 Feet from ☐ East / ☑ West Line of Section

Footages Calculated from Nearest Outside Section Corner:
☐ NE ☑ NW ☐ SE ☐ SW

GPS Location: Lat: *(e.g. xx.xxxxx)* , Long: *(e.g. -xxx.xxxxx)*

Datum: ☐ NAD27 ☐ NAD83 ☐ WGS84

County: Gove
Lease Name: H-W-Z Well #: 1-14
Field Name: Wildcat
Producing Formation: Lansing
Elevation: Ground: 2925 Kelly Bushing: 2930
Total Vertical Depth: 4700 Plug Back Total Depth: 4346
Amount of Surface Pipe Set and Cemented at: 220 Feet
Multiple Stage Cementing Collar Used? ☑ Yes ☐ No
If yes, show depth set: 2407 Feet
If Alternate II completion, cement circulated from: 0
feet depth to: 2407 w/ 150 sx cmt.

Drilling Fluid Management Plan
(Data must be collected from the Reserve Pit)

Chloride content: 9500 ppm Fluid volume: 800 bbls
Dewatering method used: Evaporated

Location of fluid disposal if hauled offsite:

Operator Name:
Lease Name: License #:
Quarter Sec. Twp. S. R. ☐ East ☐ West
County: Permit #:

AFFIDAVIT

I am the affiant and I hereby certify that all requirements of the statutes, rules and regulations promulgated to regulate the oil and gas industry have been fully complied with and the statements herein are complete and correct to the best of my knowledge.

Submitted Electronically

KCC Office Use ONLY

☑ **Confidentiality Requested**
Date: 01/21/2013
☑ **Confidential Release Date:** 01/21/2015
☑ **Wireline Log Received**
☑ **Geologist Report Received**
☐ **UIC Distribution**
ALT ☐ I ☑ II ☐ III **Approved by:** NAOMI JAMES **Date:** 01/22/2013

1108937

Operator Name: Grand Mesa Operating Company Lease Name: H-W-Z Well #: 1-14

Sec. 14 Twp. 13 S. R. 31 ☐ East ☑ West County: Gove

INSTRUCTIONS: Show important tops of formations penetrated. Detail all cores. Report all final copies of drill stems tests giving interval tested, time tool open and closed, flowing and shut-in pressures, whether shut-in pressure reached static level, hydrostatic pressures, bottom hole temperature, fluid recovery, and flow rates if gas to surface test, along with final chart(s). Attach extra sheet if more space is needed.

Final Radioactivity Log, Final Logs run to obtain Geophysical Data and Final Electric Logs must be emailed to kcc-well-logs@kcc.ks.gov. Digital electronic log files must be submitted in LAS version 2.0 or newer AND an image file (TIFF or PDF).

Drill Stem Tests Taken ☑ Yes ☐ No
(Attach Additional Sheets)

Samples Sent to Geological Survey ☑ Yes ☐ No

Cores Taken ☐ Yes ☑ No

Electric Log Run ☑ Yes ☐ No

List All E. Logs Run:
Attached

☑ Log Formation (Top), Depth and Datum ☐ Sample

Name: Attached Top: Attached Datum: Attached

CASING RECORD ☑ New ☐ Used
Report all strings set-conductor, surface, intermediate, production, etc.

Purpose of String	Size Hole Drilled	Size Casing Set (In O.D.)	Weight Lbs. / Ft.	Setting Depth	Type of Cement	# Sacks Used	Type and Percent Additives
Surface	12.25	8.625	23	220	Common	165	3% CC; 2% Gel
Production	7.875	5.50	15.50	4357	EA-2	150	1/4#sx flocele

ADDITIONAL CEMENTING / SQUEEZE RECORD

Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
☐ Perforate ☑ Protect Casing ☐ Plug Back TD ☐ Plug Off Zone	0-2407	SMD	200	
	-			

Did you perform a hydraulic fracturing treatment on this well? ☐ Yes ☐ No *(If No, skip questions 2 and 3)*

Does the volume of the total base fluid of the hydraulic fracturing treatment exceed 350,000 gallons? ☐ Yes ☐ No *(If No, skip question 3)*

Was the hydraulic fracturing treatment information submitted to the chemical disclosure registry? ☐ Yes ☐ No *(If No, fill out Page Three of the ACO-1)*

Shots Per Foot	PERFORATION RECORD - Bridge Plugs Set/Type Specify Footage of Each Interval Perforated	Acid, Fracture, Shot, Cement Squeeze Record *(Amount and Kind of Material Used)*	Depth
4	4192-4196	250gals. 15% MCA Acid w/additives	4192-4196

TUBING RECORD: Size: 2.875 Set At: 4320 Packer At: Liner Run: ☐ Yes ☑ No

Date of First, Resumed Production, SWD or ENHR. 01/04/2013

Producing Method: ☐ Flowing ☑ Pumping ☐ Gas Lift ☐ Other *(Explain)*

Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity
	40	0	0		34

DISPOSITION OF GAS:
☐ Vented ☐ Sold ☐ Used on Lease
(If vented, Submit ACO-18.)

METHOD OF COMPLETION:
☐ Open Hole ☑ Perf. ☐ Dually Comp. *(Submit ACO-5)* ☐ Commingled *(Submit ACO-4)*
☐ Other *(Specify)*

PRODUCTION INTERVAL:
4192-4196

Mail to: KCC - Conservation Division, 130 S. Market - Room 2078, Wichita, Kansas 67202

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	H-W-Z 1-14
Doc ID	1108937

All Electric Logs Run

CPDCN Micro Log
AI Shallow Focused Elect. Log
Comp. Sonic w/Integrated Transit Time
Micro. Log
Dual Rec. Cement Bond Log

Form	ACO1 - Well Completion
Operator	Grand Mesa Operating Company
Well Name	H-W-Z 1-14
Doc ID	1108937

Tops

Name	Top	Datum
Stone Corral	2392	+538
Bs/Stone Corral	2419	+511
Heebner	3948	-1018
Lansing	3991	-1061
Muncie Creek	4140	-1210
Stark	4225	-1295
Marmaton	4318	-1388
Excello	4472	-1542
Mississippian	4586	-1656
LTD	4700	

DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	**GRAND MESA OPERATING COMPANY**	**Job Number**	**M430**
Well Name	**H-W-Z #1-14**	**Representative**	**MIKE COCHRAN**
Unique Well ID	**DST#1 4140-4176 "H" ZONE**	**Well Operator**	**GRAND MESA OPERATING COMPANY**
Surface Location	**SEC.14-13S-31W GOVE CO.KS.**	**Report Date**	**2012/11/19**
Field	**WILDCAT**	**Prepared By**	**MIKE COCHRAN**
Well Type	**Vertical**	**Qualified By**	**JOHN GOLDSMITH**
		Test Unit	**NO. 1**

Test Information

Test Type	**CONVENTIONAL**
Formation	**DST#1 4140-4176 "H" ZONE**
Test Purpose (AEUB)	**Initial Test**

Start Test Date	**2012/11/19**	**Start Test Time**	**10:50:00**
Final Test Date	**2012/11/19**	**Final Test Time**	**16:30:00**
		Well Fluid Type	**01 Oil**

Gauge Name	**30037**
Gauge Serial Number	

Test Results

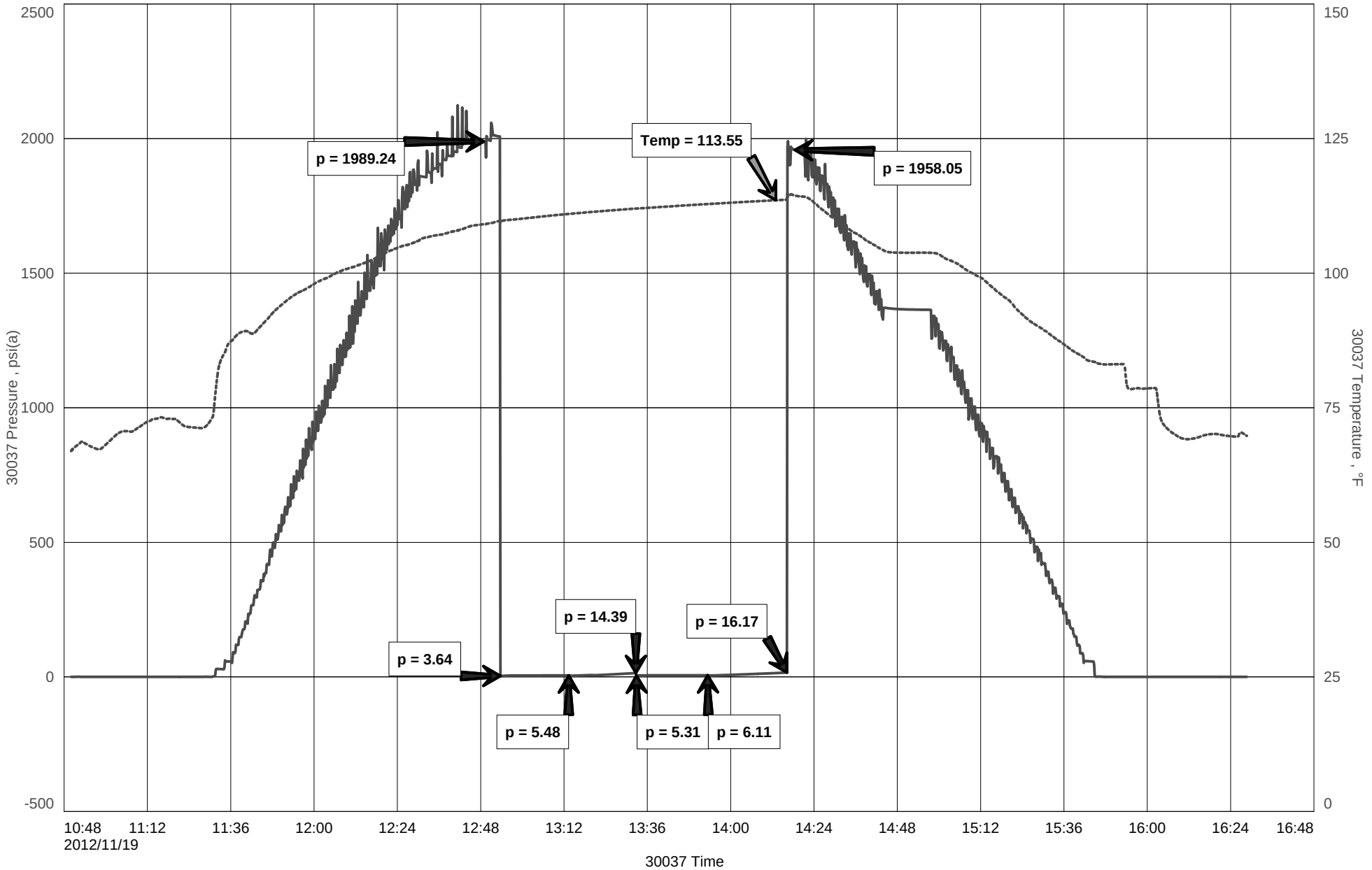
Remarks **RECOVERED:**
1' DM 100% DM
1' TOTAL FLUID

TOOL SAMPLE: 100% DM

GRAND MESA OPERATING COMPANY
DST#1 4140-4176 "H" ZONE
Start Test Date: 2012/11/19
Final Test Date: 2012/11/19

H-W-Z #1-14
Formation: DST#1 4140-4176 "H" ZONE
Pool: WILDCAT
Job Number: M430

H-W-Z #1-14



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

DRILL-STEM TEST TICKET
FILE: HWZ1-14DST1

TIME ON: 1050
TIME OFF: 1630

Company GRAND MESA OPERATING COMPANY Lease & Well No. H-W-Z #1-14

Contractor MURPHIN 24 Charge to GRAND MESA OPERATING COMPANY

Elevation 2930 KB Formation "H" ZONE Effective Pay _____ Ft. Ticket No. M430

Date 11/19/2012 Sec. 14 Twp. 13 S Range 31 W County GOVE State KANSAS

Test Approved By JOHN GOLDSMITH Diamond Representative MIKE COCHRAN

Formation Test No. 1 Interval Tested from 4140 ft. to 4176 ft. Total Depth 4176 ft.

Packer Depth 4135 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Packer Depth 4140 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set _____

Top Recorder Depth (Inside) 4122 ft. Recorder Number 30037 Cap. 6,000 P.S.I.

Bottom Recorder Depth (Outside) 4173 ft. Recorder Number 6884 Cap. 6,275 P.S.I.

Below Straddle Recorder Depth _____ ft. Recorder Number _____ Cap. _____ P.S.I.

Mud Type CHEM Viscosity 56 Drill Collar Length 118 ft. I.D. 2 1/4 in.

Weight 9.2 Water Loss 6.4 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 2,300 P.P.M. Drill Pipe Length 3990 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 1 Test Tool Length 32 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 36 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: A FEW BUBBLES ON TOOL OPEN THEN NO BLOW (NO BB)

2nd Open: A FEW BUBBLES ON TOOL OPEN THEN NO BLOW (NO BB)

Recovered 1 ft. of DM 100% DM

Recovered 1 ft. of TOTAL FLUID

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Recovered _____ ft. of _____

Remarks: _____

TOOL SAMPLE: 100% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 12:55 P.M. A.M. P.M. Time Started Off Bottom 2:15 P.M. A.M. P.M. Maximum Temperature 114

Initial Hydrostatic Pressure ..... (A) 1989 P.S.I.

Initial Flow Period ..... Minutes 20 (B) 4 P.S.I. to (C) 5 P.S.I.

Initial Closed In Period ..... Minutes 20 (D) 14 P.S.I.

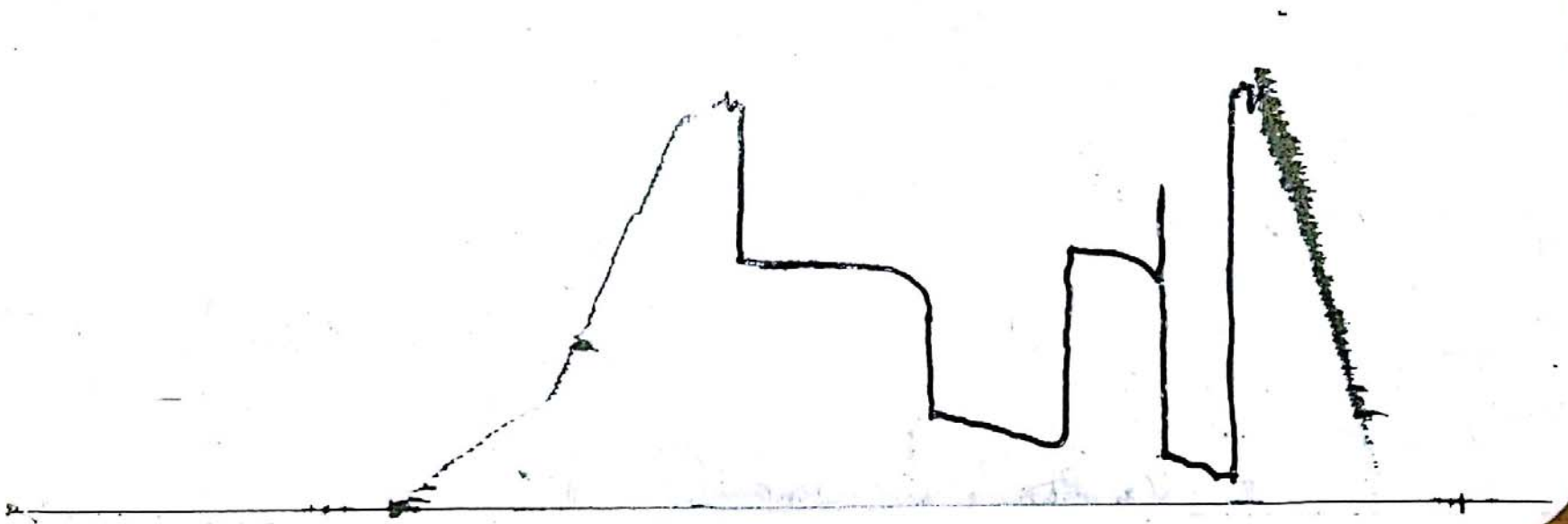
Final Flow Period ..... Minutes 20 (E) 5 P.S.I. to (F) 6 P.S.I.

Final Closed In Period ..... Minutes 20 (G) 16 P.S.I.

Final Hydrostatic Pressure ..... (H) 1958 P.S.I.

DST #2 outside 6884 4175-4224

±2 J 2DC 421



DIAMOND TESTING

Pressure Survey Report

General Information

Company Name	**GRAND MESA OPERATING COMPANY**	**Job Number**	**M431**
Well Name	**H-W-Z #1-14**	**Representative**	**MIKE COCHRAN**
Unique Well ID	**DST#2 4175-4224 I&J**	**Well Operator**	**GRAND MESA OPERATING COMPANY**
Surface Location	**SEC.14-13S-31W GOVE CO.KS.**	**Report Date**	**2012/11/20**
Field	**WILDCAT**	**Prepared By**	**MIKE COCHRAN**
Well Type	**Vertical**	**Qualified By**	**JOHN GOLDSMITH**
		Test Unit	**NO. 1**

Test Information

Test Type	**CONVENTIONAL**
Formation	**DST#2 4175-4224 I&J**
Test Purpose (AEUB)	**Initial Test**

Start Test Date	**2012/11/20**	**Start Test Time**	**03:15:00**
Final Test Date	**2012/11/20**	**Final Test Time**	**13:00:00**
		Well Fluid Type	**01 Oil**

Test Results

Remarks **RECOVERED:**

2188' GIP
500' CO 100% OIL
250' GWMCO 20% GAS, 53% OIL, 22% WTR, 5% MUD
243' GOCMW 12% GAS, 15% OIL, 64% WTR, 9% MUD
993' TOTAL FLUID

CHLOR: 32,000 PPM
PH:7.0
RW: .31 @ 80 DEG

GRAVITY: 34.2 @ 60

TOOL SAMPLE: 17% GAS, 25% OIL, 39% WTR, 19% MUD

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

DRILL-STEM TEST TICKET
FILE: HWZ1-14DST2

TIME ON: 0315
TIME OFF: 1300

Company GRAND MESA OPERATING COMPANY Lease & Well No. H-W-Z #1-14

Contractor MURPHIN 24 Charge to GRAND MESA OPERATING COMPANY

Elevation 2930 KB Formation I&J Effective Pay ____ Ft. Ticket No. M431

Date 11/20/2012 Sec. 14 Twp. 13 S Range 31 W County GOVE State KANSAS

Test Approved By JOHN GOLDSMITH Diamond Representative MIKE COCHRAN

Formation Test No. 2 Interval Tested from 4175 ft. to 4224 ft. Total Depth 4224 ft.

Packer Depth 4170 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Packer Depth 4175 ft. Size 6 3/4 in. Packer depth NA ft. Size 6 3/4 in.

Depth of Selective Zone Set ____

Top Recorder Depth (Inside) 4157 ft. Recorder Number 30037 Cap. 6,000 P.S.I.

Bottom Recorder Depth (Outside) 4221 ft. Recorder Number 6884 Cap. 6,275 P.S.I.

Below Straddle Recorder Depth ____ ft. Recorder Number ____ Cap. ____ P.S.I.

Mud Type CHEM Viscosity 54 Drill Collar Length 118 ft. I.D. 2 1/4 in.

Weight 9.3 Water Loss 6.4 cc. Weight Pipe Length 0 ft. I.D. 2 7/8 in

Chlorides 2,300 P.P.M. Drill Pipe Length 4025 ft. I.D. 3 1/2 in

Jars: Make STERLING Serial Number 1 Test Tool Length 32 ft. Tool Size 3 1/2-IF in

Did Well Flow? NO Reversed Out NO Anchor Length 49 ft. Size 4 1/2-FH in

Main Hole Size 7 7/8 Tool Joint Size 4 1/2 XH in. (31'DP) Surface Choke Size 1 in. Bottom Choke Size 5/8 in

Blow: 1st Open: SSB, BOB 4½ MIN (4½" BB)

2nd Open: GSB, BOB 10 MIN (7" BB)

Recovered 2188 ft. of GIP

Recovered 500 ft. of CO 100% OIL GRAVITY: 34.2 @ 60°

Recovered 250 ft. of GWMCO 20% GAS, 53% OIL, 22% WTR, 5% MUD

Recovered 243 ft. of GOCMW 12% GAS, 15% OIL, 64% WTR, 9% MUD (118'DC 125' DP)

Recovered 993 ft. of TOTAL FLUID

Recovered ____ ft. of CHLOR: 32,000 PPM

Remarks: PH:7.0 RW: .31 @ 80°

PRESSURES READ OFF MECHANICAL RECORDER

TOOL SAMPLE: 17% GAS, 25% OIL, 39% WTR, 19% MUD

Price Job	
Other Charges	
Insurance	
Total	

Time Set Packer(s) 5:15 A.M. A.M. P.M. Time Started Off Bottom 9:00 A.M. A.M. P.M. Maximum Temperature ____

Initial Hydrostatic Pressure..... (A) 2104 P.S.I.

Initial Flow Period..... Minutes 30 (B) 143 P.S.I. to (C) 254 P.S.I.

Initial Closed In Period..... Minutes 45 (D) 1284 P.S.I.

Final Flow Period..... Minutes 60 (E) 286 P.S.I. to (F) 452 P.S.I.

Final Closed In Period..... Minutes 90 (G) 1229 P.S.I.

Final Hydrostatic Pressure..... (H) 2088 P.S.I.

John Goldsmith Wellsite Service

Cell and Home Phone:
316-640-0236

427 Roosevelt St.
Cheney, KS 67025

Scale 1:240 (5"=100') Imperial
Measured Depth Log

Well Name: #1-14 H-W-Z
Location: 2488' FNL, 2471' FWL, SECTION 14-13S-31W
License Number: API: 15-063-22033 Region: Gove County
Spud Date: 11/14/2012 Drilling Completed: 11/22/2012
Surface Coordinates: LAT 38.6282967
LONG -100.8979283
Bottom Hole Coordinates: Vertical hole

Ground Elevation (ft): 2925' K.B. Elevation (ft): 2930'
Logged Interval (ft): 3800' To: RTD Total Depth (ft): 4700'
Formation: Mississippian at RTD
Type of Drilling Fluid: Chemical

Printed by MUD.LOG from WellSight Systems 1-800-447-1534 www.WellSight.com

OPERATOR

Company: Grand Mesa Operating Co.
Address: 1700 N. Waterfront Parkway
Bldg. 600
Wichita, KS 67206-5514

GEOLOGIST

Name: John Goldsmith
Company: John Goldsmith Wellsite Service
Address: 427 Roosevelt St.
Cheney, KS 67025
316-640-0236

COMMENTS

Contractor: Murfin Rig #24
Pusher: Tony Martin
Surface Casing: 5 joints of 8 5/8" set at 222'
Production Casing: 5.5" Production Casing was Installed.
Mud by: MudCo
DST's by: Diamond Testing
Logs by: Superior Well Services (DIL, CN-CD, ML, CS)
RTD=4700'
LTD=4700'

FORMATION TOPS	SAMPLE TOPS		LOG TOPS	
FORMATION	Depth	Datum	Depth	Datum
Queen Hill	3886'	-956	3887'	-957
Heebner Shale	3947'	-1017	3948'	-1018
Toronto	3973'	-1043	3974'	-1044
Lansing	3994'	-1064	3993'	-1063
Muncie Creek Shale	4144'	-1214	4142'	-1212
Stark Shale	4224'	-1294	4224'	-1294
Hushpuckney Shale	4262'	-1332	4262'	-1332
Base of KC	4292'	-1362	4292'	-1362
Marmaton	4320'	-1390	4318'	-1388
Upper Fort Scott	4428'	-1498	4428'	-1498
Little Osage Shale	4448'	-1518	4448'	-1518
Excello Shale	4474'	-1544	4474'	-1544
Johnson Zone	4555'	-1625	4555'	-1625
Morrow	4574'	-1644	4574'	-1644
Mississippian	4585'	-1655	4585'	-1655
RTD	4700'	-1770		
LTD			4700'	-1770

DSTs

DST #1 "H Zone" 11-19-2012 4140'-4176' 20-20-20-20
1st Open = Few Bubbles on Tool Open (No Blow Back)
2nd Open = A Few Bubbles on Tool Open (No Blow Back)
IFP = 4-5# ISIP = 14# FFP = 5-6# FSIP = 16#
HYDP = 1989-1958#
1' Total Fluid 1' DM

DST #2 "I&J Zones" 11-20-2012 4175'-4224' 30-45-60-90
1st Open = Built to BOB in 4.5" (Blow Back Built to 4.5")
2nd Open = Built to BOB in 10" (Blow Back Built to 7")
IFP = 143-254# ISIP = 1284# FFP = 286-452# FSIP = 1229#
HYDP = 2104-2088#

HYDP = 2104-2088#
993' Total Fluid 2188' GIP 500' CO
250' GWMCO (53% Oil, 22%WTR)
243' GOCMW (64%WTR, 15%Oil)

ROCK TYPES

- Anhy
- Cht
- Coal
- Congl
- Dol
- Gyp
- Lmst
- Salt
- Shale
- Shcol
- Shgy
- Sltst
- Ss
- Carb sh
- Dol
- Dtd
- Gry sh
- Sandylms
- Shale
- Sltstn
- Shlyslts
- Sltysh
- Sdy dolo
- Silty dolo
- Shy dolo
- Shaly ls

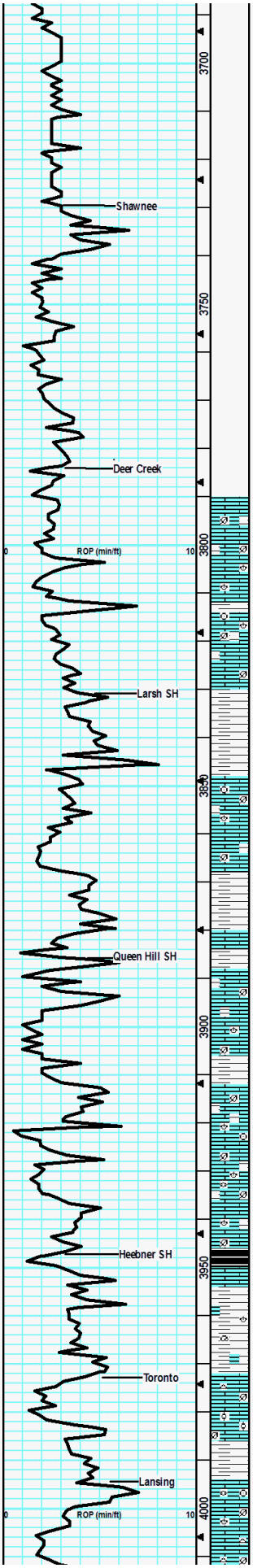
ACCESSORIES

FOSSIL
- Algae
- Amph
- Belm
- Bioclst
- Brach
- Bryozoa
- Cephal
- Coral
- Crin
- Echin
- Fish
- Foram
- Fossil
- Gastro
- Oolite
- Ostra
- Pelec
- Pellet
- Pisolite
- Plant
- Strom
- Fuss
- Oomold

MINERAL
- Anhy
- Arggrn
- Arg
- Bent
- Bit
- Brecfrag
- Calc
- Carb
- Chtdk
- Chtlt
- Dol
- Feldspar
- Ferrpel
- Ferr
- Glau
- Gyp
- Hvymin
- Kaol
- Marl
- Minxl
- Nodule
- Phos
- Pyr
- Salt
- Sandy
- Silt
- Sil
- Sulphur
- Tuff
- Chlorite
- Dol
- Sand
- Slty

STRINGER
- Anhy
- Arg
- Bent
- Coal
- Dol
- Gyp
- Ls
- Mrst
- Sltstrg
- Ssstrg
- Carbsh
- Clystn
- Dol
- Grysh
- Gryslt
- Lms
- Sandylms
- Sh
- Sltstn

ROP (min/ft)	Depth	Lithology	CFS Point	Oil Shows	Geological Descriptions	Remarks
0 ROP (min/ft) 10 AnHydrite B/AnHydrite	2400				**Morning Report Depth/Activity** 11/14/2012, Spud 11/15/12, drill @ 455' 11/16/12, drill @ 2470' 11/17/12, drill @ 3537' 11/18/12, drill @ 3940' 11/19/12, drill @ 4176' (DST #1) 11/20/12, drill @ 4224' (DST #2) 11/21/12, drill @ 4430' 11/22/12, drill @ 4610' (TD, Logging)	AnHydrite 2395' (+535) B/AnHydrite 2418' (+512) Mud-Co Check #1 @ 0' 11/14/12
0 ROP (min/ft) 10	3600				**ROP Data begin @ 3600' on 11/17/2012**	Mud-Co Check #2 @ 2507' 11/16/12 7:45am wt vis pH chl 9.1 30 7.5 15,000 Filt LCM NC Tr Mud-Co Check #3 @ 3537' 11/17/12 8:00am wt vis pH chl 8.6 58 11.0 1,500 Filt LCM 7.2 3#
	3650					



Drilling Samples began @ 3800' on 11/17/2012

LS: tan/lt tan, fn xln, sm foss, brach/frags, fw ool, sm brittle, tr-nvp, fw pcs Chert: wht/tan, foss sharp, no cup odr, ns.

LS: gry/tan, fn xln, foss brach/frags, sm brittle, tr-nvp, sm pcs pur chlk, v fw SH: gry/brn, silty, med crush, no cup odr, ns.

LS: gry/tan, fn xln, foss brach/crin/frags, sm brittle, sm chlky, tr-nvp, sm pcs pur chlk, v fw SH: gry/brn, silty, sm fissile, med crush, no cup odr, ns.

LS: gry/tan, fw foss frags, sm brittle, sm chlky, tr-nvp, fw pcs pur chlk, fw SH: gry/brn, silty, easy-med crush, no cup odr, ns.

LS: gry/tan, fn xln, sm foss frags, sm chlky/brittle, tr-nvp, fw pcs w/ drk min stns, no cut/fluor, fw pcs pur chlk, fw SH: gry/brn, silty, sm soft, no cup odr, ns.

LS: gry/tan, fn xln, sm foss frags, sm chlky, fw dense/hard, tr-nvp, fw pcs pur chlk, svrl SH: gry/brn, silty, easy-med crush, no cup odr, ns.

LS: lt gry/tan, fn xln, sm foss crin/brach/frags, sm dense/hard, fw flakey/mealy, fw chlky, tr-nvp, fw pcs pur chlk, tr-nvp, no cup odr, ns.

LS: gry/tan, fn xln, sm foss frags, sm dense, fw flakey/mealy, sm chlky, tr-nvp, fw SH: gry/brn, silty, med crush, no cup odr, ns.

LS: gry/lt tan, fn xln, fw foss frags, sm dense, fw flakey/mealy, sm chlky, tr-nvp, fw SH: gry/brn, silty, sm fissile, med crush, no cup odr, ns.

LS: gry/lt tan, fn xln, fw foss frags, sm dense, sm chlky, tr-nvp, fw pcs pur chlk, fw SH: gry/brn, silty, easy-med crush, no cup odr, ns.

LS: lt gry/lt tan, fn xln, v fw foss frags, fw dense, sm chlky, tr-nvp, sm pur chlk, v fw SH: gry/brn/grn, silty, fw waxy, no cup odr, ns.

LS: gry/tan, fn xln, fw foss brach/ plant frags, fw dense, sm chlky, tr-nvp, fw pcs pur chlk, fw SH: gry/grn/brn, silty, fw waxy, no cup odr, ns.

LS: gry/tan, sm mott, fn xln, foss brach/crin/frags, sm ool, sm brittle, fw chlky, tr-nvp, fw pcs pur chlk, fw SH: gry/grn/brn, silty, sm waxy, easy-med crush, ns.

LS: lt gry, fn xln, fw foss frags, mostly dense, sm brittle, sm chlky, tr-nvp, fw pcs pur chlk, fw SH: gry/brn, silty, easy-med crush, no cup odr, ns.

LS: lt gry/lt tan, fw xln, foss fuss/brach/frags, sm dense, sm brittle, rare scat pr intxln por, fw pcs pur chlk, fw pcs drk min stns, no cut/fluor, no cup odr, ns.

LS: gry/tan, sm mott, fn xln, foss brach/fuss/frags, sm ool, sm brittle, sm chlky, tr-nvp, svrl pcs drk min stns, no cut/fluor, fw SH: gry/blk, silty, soft, fw carb, no cup odr, ns.

LS: lt gry/tan, fn xln, sm foss frags, mostly brittle, fw dense/hard, tr-nvp, abund SH: gry/brn/grn/blk, silty, sm waxy, easy-med crush, sm carb, no cup odr, ns.

LS: gry/tan, fw mott, fn xln, sm foss brach/gast, sm dense, fw hard, fw gritty, tr-nvp, fw pcs w/ drk stns, no cut/fluor, pos drk dead oil, abund SH: gry/brn/drk gry, silty, med crush, no cup odr, ns.

LS: lt tan/crm, fn xln, fw foss frags, mostly dense, sm chlky, tr-nvp, fw pcs pur chlk, sm Chert: wht, foss, sharp, no cup odr, ns.

LS: lt gry/tan, fn xln, v fw foss frags, sm ool, mostly dense, sm chlky, tr-nvp, fw pur chlk, sm SH: gry/brn, silty, sm muddy, no cup odr, ns.

LS: tan/lt gry, fn xln, profus foss brach/crin/fuss, svrl ool, sm hard, sm fiable, tr/? intfoss/intool por, no cup odr, ns.

LS: gry/lt tan, micro-fn xln, v fw foss frags, mostly dense, sm brittle, sm chlky, tr-nvp, fw pcs pur chlk, v fw SH: gry/brn, silty, med crush, no cup odr, ns.

LS: tan/lt tan, fn xln, v fw foss frags, mostly dense, sm

Shawnee 3730' (-800)

Deer Creek 3784' (-854)

Larsh SH 3831' (-901)

Queen Hill SH 3886' (-956)

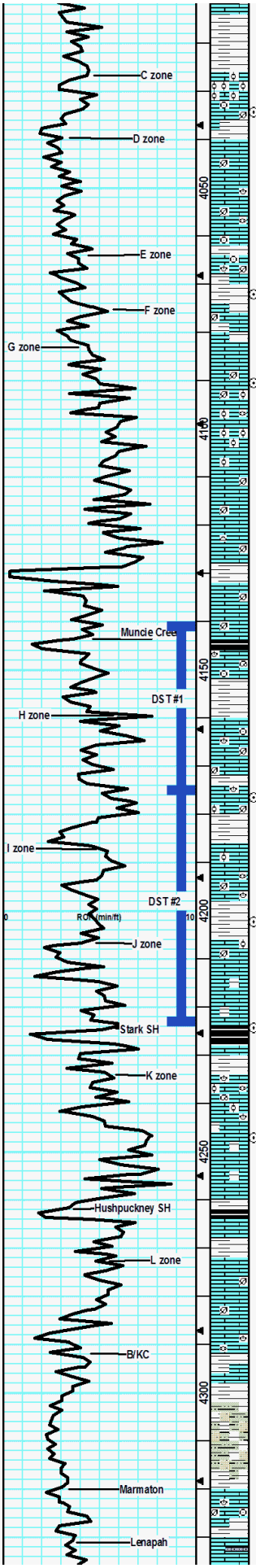
Mud-Co Check #4 @ 3970' 11/18/12 9:30am

wt	vis	pH	chl
9.1	51	11.0	2,000
Filt	LCM		
8.0	2#		

Heebner SH 3947' (-1017)

Toronto 3973' (-1043)

Lansing 3994' (-1064)



brittle/friable, tr-nvp, fw pcs chlk, sm Chert: wht/tan, foss, svrl SH: gry/brn, silty, no cup odr, ns.

LS: lt tan, micro-fn xln, v fw foss frags, sm profus ool, mosity brittle, tr/? intfoss por in sm, fw SH: gry/brn, silty, no cup odr, ns.

LS: lt tan, fn xln, fw foss frags, sm profus ool, mostly brittle, mostly dense, tr-nvp, fw SH: gry/brn/grn, silty, fw waxy, no cup odr, ns.

LS: tan/lt tan, fn xln, sm foss crin/frags, mostly dense, sm brittle, tr-nvp, svrl SH: gry/brn, silty, sm fissile, med crush, no cup odr, ns.

LS: lt tan, fn xln, fw foss frags, mostly dense, sm brittle, sm chlky, tr-nvp, sm SH: gry/brn, silty, sm fissile, med crush, no cup odr, ns.

LS: tan/lt tan, fn xln, profus foss brach/crin/fuss, mostly dense, sm brittle, fw chlky, tr-nvp, svrl SH: gry/grn/brn, silty, sm fissile, med crush, no cup odr, ns.

CFS @ 4034' (30"/60")

LS: tan, micro-fn xln, sm foss brach/crin/frags, mostly dense, sm hard, fw brittle, tr/? ppt-intxln por on frac facies, vssfo, wk/? fluor, strm cut pal blu, no cup odr.

LS: lt gry/lt tan, fn xln, v fw foss frags, mostly dense, sm brittle, scat ppt-intxln por, scat lt brn stns, scat dul yel fluor, strm cut pal blu, ssfo, v wk cup odr.

LS: gry/lt tan, fn xln, sm foss frags, mostly dense, fw brittle, sm hard, tr-nvp, 1-2 pcs w/ lt brn stns, scat dul yel fluor, cut pal blu, vssfo, no cup odr.

CFS @ 4072' (30"/60")

LS: tan/lt gry, fn xln, sm foss fuss/frags, sm ool, mostly dense, sm brittle, sms chlky, sm scat pr intool por, no cup odr, ns.

CFS @ 4072' (30"/60")

LS: lt tan/lt gry, fn xln, fw foss frags, sm ool, mostly dense, sm chlky, sm brittle, tr-pr scat intxln/intool por, fw SH: gry/drk gry, silty, med crush, no cup odr, ns.

DST #1 "H Zone" 11-19-2012
4140'-4176' 20-20-20-20
1st Open = Few Bubbles on Tool Open (No Blow Back)
2nd Open = A Few Bubbles on Tool Open (No Blow Back)
IFP = 4-5# ISIP = 14# FFP = 5-6# FSIP = 16#
HYDP = 1989-1958#
1' Total Fluid 1' DM

Muncie Creek 4144' (-1214)

LS: lt tan/lt gry, micro-fn xln, fw foss frags, mostly dense, sm chlky, sm brittle, fw flakey/mealy, tr-nvp, fw SH: gry/brn, silty, sm fissile, no cup odr, ns.

LS: gry/lt tan, fn xln, fw foss frags, mostly dense, sm chlky, sm brittle, tr-nvp, v fw SH: gry, silty, med crush, no cup odr, ns.

LS: tan/gry, micro-fn xln, fw foss frags, mostly dense, sm hard, tr-nvp, abund SH: gry/brn/blk, silty, sm fissile, sm carb, med crush, no cup odr, ns.

LS: gry/tan, fn xln, v fw foss frags, mostly dense, sm hard, fw flakey/mealy, tr-nvp, svrl SH: gry/brn/blk, silty, sm fissile, sm carb, no cup odr, ns.

Mud-Co Check #5 @ 4176'
11/19/12 9:00am

wt	vis	pH	chl
9.2	56	11.0	2,300
Filt	LCM		
6.4	2#		

LS: gry/lt tan, sm mott, fn xln, profus foss brach/gast/crin, mostly dense, sm brittle, fr scat intfoss/vug por, lt brn stns, scat dul yel fluor, strm cut pal blu, ssfo, gd cup odr.

CFS @ 4176' (30"/60")

LS: gry/lt tan, sm mott, fn xln, foss brach/crin/frags, mostly dense, sm brittle, gd scat intfoss/vug por, lt brn stn, scat dul yel fluor, strm cut pal blu, fr sfo, fr cup odr.

LS: gry/lt tan, fn xln, sm foss brach/frags, mostly dense, fw brittle, sm flakey/mealy, sm chlky, tr/? intxln por in sm, no cup odr, ns.

LS: tan/lt gry, micro-fn xln, sm foss brach/frags/ool, mostly dense, sm brittle, fw pcs w/ pr intfoss/scat fr intxln por, dul yel fluor, strm cut pal blu, fr cup odr, fr sfo, 1-2 gas bubls on brk.

CFS @ 4202' (30"/60")

LS: lt tan, micro-fn xln, sm foss fuss/brach/frags, sm ool, mostly dense, sm brittle, scat fr intfoss/ool por, dul yel fluor, strm cut pal blu, sight cup odr, ssfo.

LS: gry/lt tan, fn xln, fw foss frags, fw ool, mostly dense, sm brittle, fw flakey/mealy, sm chlky, fr scat intxln por, scat dul yel fluor, strm cut pal blu, ssfo, gd-strg cup odr.

Mud-Co Check #6 @ 4224' 11/20/12
9:30am

wt	vis	pH	chl
9.2	52	10.0	3,000
Filt	LCM		
9.6	2#		

LS: gry/lt tan, fn xln, mostly dense, sm chlky, fw flakey/meal, fw pcs w/ scat fr intxln por, 3-4 pcs w/ sho like disc above, fr cup odr.

CFS @ 4224' (30"/60")

Stark SH 4224' (-1294)

LS: lt gry/lt tan, fn xln, mostly dense, sm chlky, fw flakey/mealy, tr-nvp, fw pcs SH: gry/brn, silty, med crush, sm fissile, no cup odr, ns.

LS: lt tan, fn xln, sm prof foss, brac/fuss/gast/frags, sm ool, sm brittle, fr-gd intfoss-intool por, gas bubls cling to por, dul yel fluor, strm cut pal blu, ssfo, gd-strg cup odr, sm SH: gry/blk, silty, sm carb, Most likely from break in base of "J" above Stark SH.

LS: gry/lt tan, fn xln, sm foss brach/frags, mostly brittle, sm chalky, fw pcs w/ pr intfoss por, sm pcs pur chlk, no cup odr, ns.

CFS @ 4247'(30"/60")

Hushpuckney SH 4262' (-1332)

LS: lt gry/tan, fn xln, mostly dense, sm chlky, fw flakey/mealy, tr-nvp, fw pcs pur chlk, sm SH: gry/blk, silty, sm fissile, fw carb, no cup odr, ns.

LS: gry/tan, fn xln, mostly dense, sm hard, sm flakey/mealy, tr-nvp, fw pcs w/ drk scat stns, no cut, sm chlky, sm SH: gry/blk, silty, fw fissile, sm carb, no cup odr, ns.

DST #2 "I&J Zones" 11-20-2012
4175'-4224' 30-45-60-90
1st Open = Built to BOB in 4.5" (Blow Back Built to 4.5")
2nd Open = Built to BOB in 10" (Blow Back Built to 7")
IFP = 143-254# ISIP = 1284# FFP = 286-452# FSIP = 1229#
HYDP = 2104-2088#
993' Total Fluid 2188' GIP
500' CO
250' GWMCO (53% Oil, 22% WTR)
243' GOCMW (64% WTR, 15% Oil)

LS: gry/tan, fn-crs xln, v fw foss frags, mostly dense, fw hard, fw pcs w/ pr scat intxln por, fw pcs pur chlk, no cup odr, ns.

Base of KC 4292' (-1362)

LS: lt gry/tan, fn xln, fw foss frags, ,mostly uniform, mostly dense, sm brittle, sm chlky, tr-nvp, fw pcs pur chlk, no cup odr, ns.

LS: lt gry/tan, fn xln, sm foss brach/fuss, mostly uniform, sm brittle, sm chlky, tr-nvp, fw pcs pur chlk, fw pcs w/ light brn stn, no fluor/cut, fw SH: gry/grn/blk, silty, easy-med crush, no cup odr, ns.

SltStn: brn/gry, muddy, v soft, gritty, fw SH: gry/brn, silty, easy crush, fw SS: brn, v fn grn, arg, easy-med crush, sm muddy, no cup odr, ns.

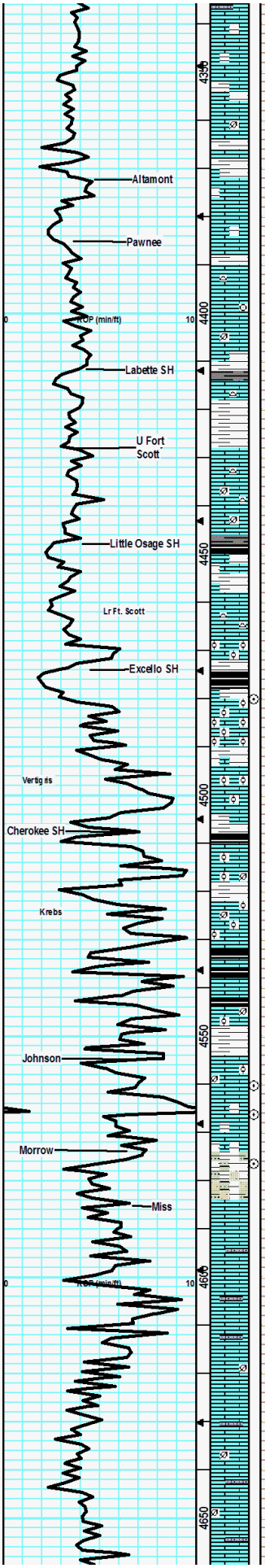
LS: gry/tan, fn-crs xln, mostly dense, sm brittle, fw flakey/mealy, tr-nvp, svrl SH: brn/gry/grn, silty, fw fissile, easy-med crush, fw SS: brn, fn grn, arg, sm muddy, easy crush, no cup odr, ns.

Marmaton 4320' (-1390)

LS: gry/tan, fn-crs xln, sm foss brach/crin/frags, mostly dense, sm hard, sm chlky, tr-nvp, sm SH: gry/grn, silty, sm fissile, med crush, no cup odr, ns.

Lenapah 4331' (-1401)

LS: gry/tan, fn xln, sm sandy/gritty/silty, mostly dense, sm chlky, sm brittle, tr-nvp, fw SH: gry/grn, silty, sm fissile, med



LS: lt gry/lt tan, fn xln, mostly dense, sm chlky, sm brittle, sm SH: gry/grn, silty, fw waxy, easy-med crush, no cup odr, ns.

LS: gry/lt tan, fn xln, sm dense, mostly chlky, sm brittle, tr-nvp, fw pcs pur chlk, sm SH: gry, silty, soft, no cup odr, ns.

LS: tan/lt tan, fn-crs xln, fw foss frags, mostly dense, sm hard, tr-nvp, fw pcs pur chlk, sm SH: gry/drk gry, silty, sm fissile, med crush, no cup odr, ns.

LS: lt tan/lt gry, fn xln, mostly dense, sm hard, fw brittle/chlky, tr-nvp, fw pcs pur chlk, sm SH: gry/grn/brn, silty, fw fissile, fw waxy, easy-med crush, no cup odr, ns.

Altamont 4371' (-1441)

LS: gry, fn xln, mostly dense, sm flakey/mealy, mostly chlky, tr-nvp, fw pcs pur chlk, sm SH: gry/brn, silty, easy-med crush, no cup odr, ns.

Pawnee 4385 (-1455)

LS: gry/lt tan, fn-crs xln, mostly dense, sm flakey/mealy, sm brittle, fw pcs w/ pr scat intxln por, fw SH: gry/brn, silty, no cup odr, ns.

LS: gry/tan, fn-crs xln, fw foss crin/frags, mostly dense, sm flakey/mealy, fw brittle, tr-nvp, fw SH: gry/brn, silty, med crush, no cup odr, ns.

LS: gry/lt tan, sm mott, fn-crs, xln, fw foss frags, mostly dense, sm flakey/mealy, fw gritty/sandy, pr scat intxln por in sm, fw chlky, fw SH: gry/brn, silty, med crush, no cup odr, ns.

Labette SH 4412' (-1482)

LS: lt gry/lt tan, micro-fn xln, mostly dense, sm hard, fw brittle, fw chlky, tr-nvp, fw pcs of pur chlk, fw Chert: wht/opaque, sharp, no cup odr, ns.

Up Ft. Scott 4428' (-1498)

LS: gry/lt tan, fn xln, mostly dense, fw hard, sm brittle, fw chlky, fw flakey/mealy, tr-nvp, fw pcs pur chlk, v fw SH: gry, silty, med crush, no cup odr, ns.

LS: gry/tan, sm mott, fn-crs xln, fw foss frags, sm hard, sm flakey/mealy, tr-nvp, fw Chert brn, foss, sharp, fw SH: gry/blk, silty, sm carb, med crush, no cup odr, ns.

Little Osage SH 4448 (-1518)

LS: brn/lt tan, fn xln, mostly dense, fw hard, sm chlky/brittle, tr-nvp, fw pcs w/ light brn stns, no fluor/cut, fw SH: gry/blk, sm carb, no cup odr, ns.

LS: tan/lt tan, fn xln, semi-uniform, mostly dense, sm brittle, fw chlky, tr-nvp, fw Chert wht, sharp, no cup odr ns.

Mud-Co Check #7 @ 4443'
11/21/12 9:00am

wt	vis	pH	chl
9.4	54	10.0	3,200
Filt	LCM		
8.8	3#		

LS: gry/tan, sm mott, fn xln, sm profus ool, mostly dense, sm brittle, fw chlky, tr-nvp, svrl pcs pur chlk, abund SH: gry/blk, silty, sm fissile, mostly carb, med crush, no cup odr, ns.

Excello SH 4474' (-1544)

CFS @ 4480' (30"/60")

LS: brn/lt tan, fn xln, fw foss frags, sm profus ool, mostly dense, sm hard, sm chlky/brittle, tr-nvp, fw pcs pur chlk, no cup odr, ns.

LS: gry/tan, fn xln, most profus ool, mostly dense, sm hard, fw pcs brittle, tr-nvp, v fw SH: gry/brn, silty, med crush, no cup odr, ns.

LS: gry/brn, fn-crs xln, sm ool, mostly hard, fw pcs flakey/mealy, tr-nvp, fw pcs w/ drk min stns, no cut/fluor, sm SH: gry/brn/blk, silty, sm carb, med crush, no cup odr, ns.

Cherokee SH 4508' (-1578)

LS: lt tan/lt gry, fn xln, fw foss frags, sm ool, mostly dense, fw pcs flakey/mealy, tr-nvp, svrl SH: gry/brn/grn, silty, fw waxy, easy-med crush, no cup odr, ns.

LS: tan/lt gry, fn xln, fw foss frags, sm ool, mostly dense, fw brittle, tr-nvp, fw Chert wht, foss, svrl SH: gry/brn/grn, silty, fw fissile, med crush, no cup odr, ns.

Mud-Co Check #8 @ 4640' 11/22/12 9:30am

wt	vis	pH	chl
9.3	47	10.5	2,500
Filt	LCM		
7.2	2#		

LS: gry/tan, fn xln, v fw foss frags, mostly dense, sm chlky, sm brittle, tr-nvp, sm SH: gry/brn, silty, sm fissile, med crush, no cup odr, ns.

LS: gry/lt tan, sm mott, fn xln, sm ool, sm flakey/mealy, sm brittle, tr-nvp, sm SH: gry/brn/grn, silty, sm fissile, med crush, no cup odr, ns.

LS: lt tan/gry, fn-crs, xln, fw foss frags, sm ool, sm chlky and brittle, fw flakey/mealy, sm pr scat intxln por, sm SH: gry/brn, silty, fw fissile, easy-med crush, no cup odr, ns.

Johnson 4555' (-1625)

CFS @ 4560' (30"/60")

CFS @ 4566' (30"/60")

LS: tan/lt tan, fn-crs xln, mostly dense, sm flakey/mealy, sm chlky, tr-nvp, abund SH: gry/brn, silty, med crush, fw SS: silvr/gry, fn grn, friable, no cup odr, ns.

LS: tan/lt tan, fn xln, mostly dense, sm hard, fw flakey/mealy, tr-nvp, abund SH: gry/brn/grn, silty, fw fissile, sm waxy, easy-med crush, no cup odr, ns.

Morrow 4574' (-1644)

CFS @ 4576' (30"/60")

LS: tan/lt tan, fn-crs xln, v fw foss frags, fw ool, mostly hard, sm flakey/mealy, tr/? intxln por in sm, svrl SH: gry/brn/grn, silty, sm fissile, easy-med crush, no cup odr, ns.

Mississippi 4585' (-1655)

LS: tan/lt tan, fn-crs, xln, mostly dense, sm hard, sm flakey/mealy, tr-nvp, svrl SH: gry/brn/grn, silty, easy-med crush, fw SltStn: gry, soft, muddy, v fw SS: grn/gry, v fn gry, arg, easy crush, no cup odr, ns.

LS: lt tan/crm, fn xln, sm sandy/gritty, sm flakey/mealy, fw brittle, tr-nvp, svrl SH: gry/brn/grn, silty, fw fissile, easy-med crush, no cup odr, ns.

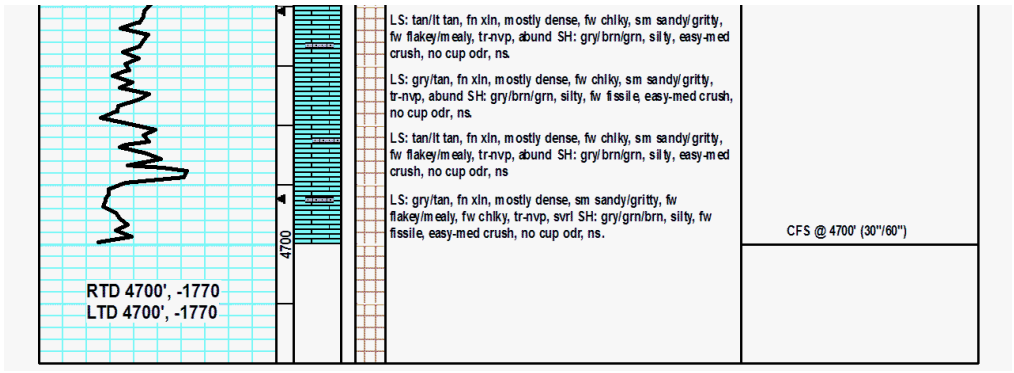
LS: gry/tan, fn xln, fw foss frags, mostly dense, sm brittle, tr-nvp, svrl SH: gry/brn/grn, silty, fw gritty/sandy, med crush, no cup odr, ns.

LS: tan/lt tan/crm, fn xln, mostly dense, sm brittle, fw sandy/gritty, fw flakey/mealy, tr-nvp, abund SH: gry/brn/grn, silty, sm fissile, easy-med crush, no cup odr, ns.

LS: tan/lt gry, fn xln, sm foss brach/frags, mostly dense, sm hard, fw sandy/gritty, tr-nvp, abund SH: gry/brn, silty, fw fissile, easy-med crush, no cup odr, ns.

LS: lt tan, fn xln, fw sandy/gritty, mostly dense, sm brittle, tr-nvp, abund SH: gry/brn/grn, silty, sm fissile, easy-med crush, no cup odr, ns.

LS: lt tan, fn xln, v fw foss frags, mostly dense, sm chlky, sm brittle, tr-nvp, abund SH: gry/brn/grn, silty, fw fissile, easy-med crush, no cup odr, ns.


RTD 4700', -1770
LTD 4700', -1770
4700
LS: tan/lt tan, fn xln, mostly dense, fw chlky, sm sandy/gritty, fw flakey/mealy, tr-nvp, abund SH: gry/brn/grn, silty, easy-med crush, no cup odr, ns.
LS: gry/tan, fn xln, mostly dense, fw chlky, sm sandy/gritty, tr-nvp, abund SH: gry/brn/grn, silty, fw fissile, easy-med crush, no cup odr, ns.
LS: tan/lt tan, fn xln, mostly dense, fw chlky, sm sandy/gritty, fw flakey/mealy, tr-nvp, abund SH: gry/brn/grn, silty, easy-med crush, no cup odr, ns
LS: gry/tan, fn xln, mostly dense, sm sandy/gritty, fw flakey/mealy, fw chlky, tr-nvp, svrl SH: gry/grn/brn, silty, fw fissile, easy-med crush, no cup odr, ns.
CFS @ 4700' (30"/60")

Conservation Division
Finney State Office Building
130 S. Market, Rm. 2078
Wichita, KS 67202-3802

Kansas
Corporation Commission

Phone: 316-337-6200
Fax: 316-337-6211
http://kcc.ks.gov/

January 21, 2013

Ronald N. Sinclair
Grand Mesa Operating Company
1700 N WATERFRONT PKWY BLDG 600
WICHITA, KS 67206-5514

Re: ACO1
API 15-063-22033-00-00
H-W-Z 1-14
NW/4 Sec.14-13S-31W
Gove County, Kansas

Dear Production Department:

We are herewith requesting that the Well Completion Form ACO-1 and attached information for the subject well be held confidential for a period of two years.

Should you have any questions or need additional information regarding subject well, please contact our office.

Respectfully,
Ronald N. Sinclair

ALLIED OIL & GAS SERVICES, LLC 056344

Federal Tax I.D.# 20-5975804

REMIT TO P.O. BOX 31
RUSSELL, KANSAS 67665

SERVICE POINT: Oakley, KS

DATE 11-14-12	SEC. 14	TWP. 13	RANGE 31	CALLED OUT	ON LOCATION 6:30pm	JOB START 7:00pm	JOB FINISH 7:30pm
LEASE Hatz	WELL # 1-14	LOCATION Oakley, 11S, 5E, 3S, 1½E				COUNTY Gove	STATE KS
OLD OR NEW (Circle one)		Winto					

8.05

1.01

CONTRACTOR Murfin 24 OWNER Same

TYPE OF JOB Surface
HOLE SIZE 12¼ T.D. 220'
CASING SIZE 8⅝ DEPTH 220'
TUBING SIZE DEPTH
DRILL PIPE DEPTH
TOOL DEPTH
PRES. MAX MINIMUM
MEAS. LINE SHOE JOINT
CEMENT LEFT IN CSG. 15'
PERFS.
DISPLACEMENT 16.25 bbl

CEMENT

AMOUNT ORDERED 165 sks com 3%CC 2%gel

		@	
COMMON	165 sks	@ 17.90	2953.50
POZMIX		@	
GEL	3 sks	@ 23.40	70.20
CHLORIDE	6 sks	@ 64.00	384.00
ASC		@	
HANDLING	178 cf 173	@ 2.48	442.46
MILEAGE	8.14/ton/mi 21 X 260		444.44
		TOTAL	4294.60

170.93

EQUIPMENT

PUMP TRUCK # 431 CEMENTER LaRene Kidwell
HELPER Wayne Mcglyhn
BULK TRUCK # 347 DRIVER David Scarano 3
BULK TRUCK # DRIVER

REMARKS:

Mix 165 sks cement
Displace with water
Cement did circulate

Thank you

SERVICE

		@	
DEPTH OF JOB	220'		
PUMP TRUCK CHARGE			1512.25
EXTRA FOOTAGE		@	
MILEAGE MI HU	21	@ 7.70	161.70
MANIFOLD	swedge	@	275.00
Mi LV	21	@ 4.40	92.40
		@	
		TOTAL	2041.35

CHARGE TO: Grand Mesa
STREET
CITY STATE ZIP

PLUG & FLOAT EQUIPMENT

	@	
	@	
	@	
	@	
	@	
	@	
	TOTAL	

To: Allied Oil & Gas Services, LLC.
You are hereby requested to rent cementing equipment and furnish cementer and helper(s) to assist owner or contractor to do work as is listed. The above work was done to satisfaction and supervision of owner agent or contractor. I have read and understand the "GENERAL TERMS AND CONDITIONS" listed on the reverse side.

PRINTED NAME Anthony Martin

SIGNATURE Anthony Martin

SALES TAX (If Any) 274.31

TOTAL CHARGES 6,335.95

DISCOUNT 1520.62 IF PAID IN 30 DAYS

4815.33

24%

JOB LOG

SWIFT Services, Inc.

DATE 11-23-12 | PAGE NO. 1

CUSTOMER	WELL NO.	LEASE	JOB TYPE	TICKET NO.
Grand Mesa	1-14	H-W-Z	Cement 5½" Longstring	23661

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS 5½ 15.5#
								TD-4700' TP-4362' set@-4357'
								Shoe Jt - #1 16' PC. top #47 2407'
								Centralizer - #2 #3 #4 #5 #6 #46
								Basket - #2 #47
								150 sks EA-2 w/ ¼ Flocele
	0530							on Location
	0620							Start 5½" 15.5# casing in well
	0815							Drop ball Circulate
	0858	6¾	12		✓		300	Pump 500 gal Mud Flush
		6¾	20		✓		300	Pump 20 bbl KCL Flush
			7-5					Plug RH - MH (30-20)
	0911	4½	24		✓		200	mix 100 sks EA-2 @ 15.5 ppg
								wash out Pump + Lines
								Release Latch Down Plug
	0924	6¾	0		✓		0	Start Displacement
	~~0924~~	6¾	103.4				1,500	Land Latch Down Plug
	0945							Release PSI Hold
								wash up truck
	1020							Job Complete
								Thank You
								Dave Blaine TJ Rob

JOB LOG

SWIFT Services, Inc.

DATE 11-27-12 | PAGE NO. 1

CUSTOMER	WELL NO.	LEASE	JOB TYPE	TICKET NO.
Grand Mesa O.I. Co.	1-14	HWZ	Cement Prod Csg	28943

CHART NO.	TIME	RATE (BPM)	VOLUME (BBL) (GAL)	PUMPS T	PUMPS C	PRESSURE (PSI) TUBING	PRESSURE (PSI) CASING	DESCRIPTION OF OPERATION AND MATERIALS
	0830					2 7/8	5 1/2	On loc - P.C. Tool
	11:30							On loc P.T - Rig run Tbg / tool
								Set up P.T. 4 1/2 - 74 1/2 (89)
								Locate P.C @ 2407' = 14.88 Bbl
	1300					1000	1000	Tst. P.C closed - OK
		3	3			C	700	open P.C. - inj rate
								Hook to Tbg -
		3	~~5~~			300	C	Start H_2O
		3	~~8~~			~~300~~		Have cir - Start cmt (SMD)
		3	95			~~200~~ 300		Cmt. cir @ 175 sks @ 11.2 #/gal
		3				250		Tail in 25 sks @ 13 #/gal
		3	105			450		Fin cmt - Displ 13 Bbl H_2O
		3	13			250		Fin Displ.
							1000	Close P.C & tst closed - OK
								Rev 5 Bbls Hvy.
			~~13~~ 17					Rev-out 2 Bbls - clean
			30					Fin Rev out - (30 Bbl) Hvy
								Job Complete
								Wash up & Release Trk
								Travis, Dean & Bob.
								175 sks @ 11.2 #/gal to cir
								25 sks @ 13 #/gal tail end
								200 sks SMD used
								25 sks to Pit.
	14:45							

Pro-Stim Chemicals LLC

Date 12-5-12

Acidizing Report

Customer: Grand Mesa	Pro-Stim Chemical Yard: Dighton	Pro-Stim Number: A3	
Well Name & Number: H-W-I 1-14	Field:	Formation:	Spot:
County: Gove	State: KS	BHT:	YD:	Interval: 4192-4196

Well Type: Completion ☐ Recompletion ☐ Workover ☐ Oil ☐ Gas ☐ Water ☐ Disposal ☐ Perf ☐ OH ☐

Job Pumped Via: Tubing ☐ Casing ☐ Annulus ☐ CTU ☐ Combination ☐ | Plug Depth: | Packer Depth: 4150

Casing Size:	GRD	WT	Depth	Tubing Size:	GRD	WT	Spot
Casing Vol.	Tbg Vol		Ann Vol	OH Vol	Total Displacement		
Maximum Pressure	Tubing		Casing	Proposed Pump Time	AOL	Leave Loc	

Special Instructions: 250 gal 15% HC-1 Acid 5 Renab

est cost

Treatment Record

Time	Type Fluid	Rate BMP	Increment Vol Bbls	Cum Vol Bbls	Pressure Tubing	Pressure Casing	Observations
							Safety Meeting
							Prs Test to _____ psi
10:02	Acid	1.0	1.0		0	0	Spot
10:16	Acid	2.8	6.0		30		
10:16	flush	2.8	6.1		30		
10:20	"	3.2	15		50		
10:20	"	0.6	23.3		250		
10:22	"	0.0	23.5		300		
10:22	"	0.0	23.5		300		
10:30	"	0.0	23.5		300		
10:43	"	0.0	23.8		400		
10:50	"	0.0	23.8		500		
11:03	"	0.0	24.5		500		
11:05	"	.3	24.7		470		
11:09	"	.3	25.5		460		
11:13	"	.3	26.5		470		
11:17	"	.3	27.5		500		
	"	.3	28.5		450		
	"	.3	30		450		

Treatment Synopsis

Avg Inj Rate	Fluid BPM		Total Injected	H2O 264	Acid 6	Oil	
Treating Prs	Max	Final	Avg.	ISIP 300	4 MIN	10'SI	15'SI
Customer Representative					Pro-Stim Supervisor	Zero	