



Confidentiality Requested:

Yes  No

KANSAS CORPORATION COMMISSION 1236311  
OIL & GAS CONSERVATION DIVISION

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 # \_\_\_\_\_

Name: \_\_\_\_\_

Address 1: \_\_\_\_\_

Address 2: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_ + \_\_\_\_\_

Contact Person: \_\_\_\_\_

Phone: ( \_\_\_\_\_ ) \_\_\_\_\_

CONTRACTOR: License # \_\_\_\_\_

Name: \_\_\_\_\_

Wellsite Geologist: \_\_\_\_\_

Purchaser: \_\_\_\_\_

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 #: \_\_\_\_\_

Spud Date or Recompletion Date	Date Reached TD	Completion Date or Recompletion Date
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API No. 15 - \_\_\_\_\_

Spot Description: \_\_\_\_\_

\_\_\_\_\_ - \_\_\_\_\_ - \_\_\_\_\_ Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West

\_\_\_\_\_ Feet from  North /  South Line of Section

\_\_\_\_\_ Feet from  East /  West Line of Section

Footages Calculated from Nearest Outside Section Corner:

- NE       NW       SE       SW

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

Datum:  NAD27       NAD83       WGS84

County: \_\_\_\_\_

Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Field Name: \_\_\_\_\_

Producing Formation: \_\_\_\_\_

Elevation: Ground: \_\_\_\_\_ Kelly Bushing: \_\_\_\_\_

Total Vertical Depth: \_\_\_\_\_ Plug Back Total Depth: \_\_\_\_\_

Amount of Surface Pipe Set and Cemented at: \_\_\_\_\_ Feet

Multiple Stage Cementing Collar Used?  Yes  No

If yes, show depth set: \_\_\_\_\_ Feet

If Alternate II completion, cement circulated from: \_\_\_\_\_

feet depth to: \_\_\_\_\_ w/ \_\_\_\_\_ sx cmt.

Drilling Fluid Management Plan

(Data must be collected from the Reserve Pit)

Chloride content: \_\_\_\_\_ ppm Fluid volume: \_\_\_\_\_ bbls

Dewatering method used: \_\_\_\_\_

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: \_\_\_\_\_
- Confidential Release Date: \_\_\_\_\_
- Wireline Log Received
- Geologist Report Received
- UIC Distribution
- ALT  I  II  III Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

1236311

Operator Name: \_\_\_\_\_ Lease Name: \_\_\_\_\_ Well #: \_\_\_\_\_

Sec. \_\_\_\_\_ Twp. \_\_\_\_\_ S. R. \_\_\_\_\_  East  West County: \_\_\_\_\_

**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 <input type="checkbox"/> Yes <input type="checkbox"/> No <i>(Attach Additional Sheets)</i>  Samples Sent to Geological Survey <input type="checkbox"/> Yes <input type="checkbox"/> No  Cores Taken <input type="checkbox"/> Yes <input type="checkbox"/> No Electric Log Run <input type="checkbox"/> Yes <input type="checkbox"/> No  List All E. Logs Run: _____	<input type="checkbox"/> Log Formation (Top), Depth and Datum <input type="checkbox"/> Sample  Name Top Datum
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CASING RECORD <input type="checkbox"/> New <input type="checkbox"/> 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

ADDITIONAL CEMENTING / SQUEEZE RECORD				
Purpose:	Depth Top Bottom	Type of Cement	# Sacks Used	Type and Percent Additives
<input type="checkbox"/> Perforate <input type="checkbox"/> Protect Casing <input type="checkbox"/> Plug Back TD <input type="checkbox"/> Plug Off Zone				

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 <i>(Amount and Kind of Material Used)</i>	Depth

TUBING RECORD:	Size:	Set At:	Packer At:	Liner Run: <input type="checkbox"/> Yes <input type="checkbox"/> No
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Date of First, Resumed Production, SWD or ENHR.	Producing Method: <input type="checkbox"/> Flowing <input type="checkbox"/> Pumping <input type="checkbox"/> Gas Lift <input type="checkbox"/> Other <i>(Explain)</i> _____
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Estimated Production Per 24 Hours	Oil Bbls.	Gas Mcf	Water Bbls.	Gas-Oil Ratio	Gravity

<b>DISPOSITION OF GAS:</b> <input type="checkbox"/> Vented <input type="checkbox"/> Sold <input type="checkbox"/> Used on Lease <i>(If vented, Submit ACO-18.)</i>	<b>METHOD OF COMPLETION:</b> <input type="checkbox"/> Open Hole <input type="checkbox"/> Perf. <input type="checkbox"/> Dually Comp. <input type="checkbox"/> Commingled <i>(Submit ACO-5)</i> <input type="checkbox"/> Other <i>(Specify)</i> _____	<b>PRODUCTION INTERVAL:</b> _____ _____
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810 E 7<sup>TH</sup>  
 PO Box 92  
 EUREKA, KS 67045  
 (620) 583-5561



**Cement or Acid Field Report**

Ticket No **1744**  
 Foreman Steve Meud  
 Camp Eureka

15-017-20919

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State
11-17-14	1034	Madden Unit # 3	31	19S	6E	Chase	KS
Customer			Unit #	Driver		Unit #	Driver
Range Oil Company Inc			104	Mann			
Mailing Address			112	Johns			
P.O. Box 781775							
City	State	Zip Code					
Wichita	KS	67278					

Job Type Surface Hole Depth 216' Slurry Vol. \_\_\_\_\_ Tubing \_\_\_\_\_  
 Casing Depth 208 GL Hole Size 12 1/4 Slurry Wt. \_\_\_\_\_ Drill Pipe \_\_\_\_\_  
 Casing Size & Wt. 8 3/8 23# Cement Left in Casing 20' Water Gal/SK \_\_\_\_\_ Other \_\_\_\_\_  
 Displacement 12 1/2 bbls Displacement PSI \_\_\_\_\_ Bump Plug to \_\_\_\_\_ BPM \_\_\_\_\_

Remarks: Safety Meeting: Rig up to 8 3/8 casing. Break circulation by fresh water. Mix 180 sks Class A cement by 3% CaCl2. Shut down Release plug. Displace 12 1/2 bbls fresh water. Shut well in. Good cement returns to surface 10 bbls to pit. Job complete Rig down

Thank you

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C101	1	Pump Charge	840.00	840.00
C107	50	Mileage	3.95	197.50
C200	180 sks	Class A Cement	15.00	2700.00
C205	510 #	3% CaCl2	.60	306.00
C10313	8.46	Ton mileage Bulk Truck	1.35	571.05
C413	1	8 3/8 wooden plug	80.00	80.00
C506	2	8 3/8 Centralizer	65.00	130.00
C606	1	8 3/8 Basket	308.00	308.00
			Subtotal	5102.55
			6.15% Sales Tax	216.73

Authorization Witness by Carter Gulick Title Tool pusher Total 5349.28

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.

810 E 7<sup>TH</sup>  
 PO Box 92  
 EUREKA, KS 67045  
 (620) 583-5561



COPY

**Cement or Acid Field Report**  
 Ticket No. 1965  
 Foreman Kevin McCoy  
 Camp \_\_\_\_\_

API \*15-017-20919

Date	Cust. ID #	Lease & Well Number	Section	Township	Range	County	State
11-23-14	1034	Madden Unit #3	31	19S	6E	CHASE	Ks
Customer RANGE OIL Company, INC.		Safety Meeting KM DG SW JS	Unit #	Driver		Unit #	Driver
Mailing Address P.O. Box 781775			105	DAVE G			
City WICHITA			110	Scott W.			
State Ks			145	John S.			
Zip Code 67278							

Job Type Longstring Hole Depth 2296' KB Slurry Vol. 59 BBL Tubing \_\_\_\_\_  
 Casing Depth 2285.01 G.L. Hole Size 7 7/8" Slurry Wt. 13.7 # Drill Pipe \_\_\_\_\_  
 Casing Size & Wt. 5 1/2" 14 # Cement Left in Casing 5.50' Water Gal/SK 9.0 Other \_\_\_\_\_  
 Displacement 57 1/4 BBL Displacement PSI 800 Bump Plug to 1300 PSI BPM \_\_\_\_\_

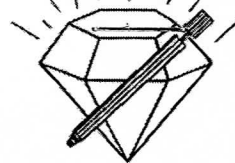
Remarks: SAFETY Meeting: Rig up to 5 1/2 casing. BREAK CIRCULATION w/ 5 BBL Fresh water, Pump 12 BBL Metasilicate Pre Flush 5 BBL WATER SPACER. MIXED 180 SKS THICK Set Cement w/ 5 # Kol-Seal /SK @ 13.7 #/GAL, yield 1.85 = 59 BBL SLURRY. WASH out Pump & Lines. Shut down. Release Latch down Plug. Displace Plug to SEAT w/ 57 1/4 BBL Fresh water. FINAL Pumping Pressure 800 PSI. Bump Plug to 1300 PSI. WAIT 2 mins. Release Pressure. Float & Plug Held. Good CIRCULATION @ ALL times while Cementing. Job Complete. Rig Down.

CENTRALIZERS ON #1 ← SJ, #3, 5, 7, 40, 42 BASKET ON TOP OF MARKER JOINT #23

Code	Qty or Units	Description of Product or Services	Unit Price	Total
C 102	1	Pump Charge	1050.00	1050.00
C 107	50	Mileage	3.95	197.50
C 201	180 SKS	THICK Set Cement	19.50	3510.00
C 207	900 #	Kol-Seal 5 #/SK	.45	405.00
C 216	100 #	Metasilicate Pre Flush	<del>6.00</del>	<del>600.00</del>
C 108 B	9.9 TONS	Ton Mileage 50 miles	1.35	668.25
C 113	5 HRS	80 BBL VAC TRUCK	85.00	425.00
C 224	3300 GALS	CITY WATER	10.00/1000	33.00
C 703	1	5 1/2 AFU INSERT Flapper Valve	145.00	145.00
C 421	1	5 1/2 LATCH down Plug	230.00	230.00
C 604	1	5 1/2 Cement BASKET	225.00	225.00
C 504	6	5 1/2 x 7 7/8 CENTRALIZERS	48.00	288.00
<u>THANK You</u>			Sub TOTAL	<u>7330.755</u>
			Sales Tax	<u>300.991</u>
			6.15%	<u>7631.746</u>

Authorization Witnessed By GARY Reed Title \_\_\_\_\_ Total 7631.746

I agree to the payment terms and conditions of services provided on the back of this job ticket. Any amendments to payment terms must be in writing on the front of this job ticket or in the Customer's records at ELITE's office.



**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
madden3dst1

Company Range Oil Company, Inc. Lease & Well No. Madden Unit No. 3  
Elevation 1481 EGL Formation Viola Effective Pay \_\_\_\_\_ Ft. Ticket No. S0520  
Date 11-21-14 Sec. 31 Twp. 19S Range 6E County Chase State Kansas  
Test Approved By Kenneth C. Wallace Diamond Representative Jacob McCallie

Formation Test No. 1 Interval Tested from 2,178 ft. to 2,187 ft. Total Depth 2,187 ft.  
Packer Depth 2,173 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 2,178 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 2,159 ft. Recorder Number 5515 Cap. 5,000 psi.  
Bottom Recorder Depth (Outside) 2,179 ft. Recorder Number 5586 Cap. 5,000 psi.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor C & G Drilling Company - Rig 1 Drill Collar Length 178 ft. I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 53 Weight Pipe Length \_\_\_\_\_ ft. I.D. \_\_\_\_\_ in.  
Weight 9.3 Water Loss 7.6 cc. Drill Pipe Length 1,967 ft. I.D. 3 in.  
Chlorides 880 P.P.M. Test Tool Length 33 ft. Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number 4 Anchor Length 9 ft. 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-FH in.

Blow: 1st Open: Weak, surface blow increasing to 2 ins. in 30 mins. No blow back during shut-in.  
2nd Open: No blow increasing to 1 1/4 ins. in 60 mins. No blow back during shut-in.

Recovered 45 ft. of clean oil = .221400 bbls. (Grind out: 100%-oil) Gravity: 29 @ 60°

Recovered 10 ft. of oil cut mud = .049200 bbls. (Grind out: 27%-oil; 73%-mud)

Recovered 55 ft. of TOTAL FLUID = .270600 bbls.

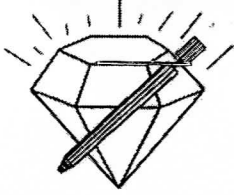
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks Tool Sample Grind Out: 18%-oil; 82%-mud  
Diesel in bucket.

Time Set Packer(s) 6:54 P.M. Time Started off Bottom 9:54 P.M. Maximum Temperature 92°  
Initial Hydrostatic Pressure.....(A) 1057 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 8 P.S.I. to (C) 17 P.S.I.  
Initial Closed In Period.....Minutes 30 (D) 754 P.S.I.  
Final Flow Period.....Minutes 60 (E) 18 P.S.I. to (F) 30 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 753 P.S.I.  
Final Hydrostatic Pressure.....(H) 1049 P.S.I.



**DIAMOND TESTING, LLC**  
P.O. Box 157  
**HOISINGTON, KANSAS 67544**  
(620) 653-7550 • (800) 542-7313  
madden3dst2

Company Range Oil Company, Inc. Lease & Well No. Madden Unit No. 3  
Elevation 1481 EGL Formation Viola Effective Pay \_\_\_\_\_ Ft. Ticket No. S0521  
Date 11-22-14 Sec. 31 Twp. 19S Range 6E County Chase State Kansas  
Test Approved By Kenneth C. Wallace Diamond Representative Jacob McCallie

Formation Test No. 2 Interval Tested from 2,187 ft. to 2,197 ft. Total Depth 2,197 ft.  
Packer Depth 2,182 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Packer Depth 2,187 ft. Size 6 3/4 in. Packer Depth \_\_\_\_\_ ft. Size \_\_\_\_\_ in.  
Depth of Selective Zone Set \_\_\_\_\_ ft.

Top Recorder Depth (Inside) 2,168 ft. Recorder Number 5515 Cap. 5,000 psi.  
Bottom Recorder Depth (Outside) 2,188 ft. Recorder Number 5586 Cap. 5,000 psi.  
Below Straddle Recorder Depth \_\_\_\_\_ ft. Recorder Number \_\_\_\_\_ Cap. \_\_\_\_\_ psi.

Drilling Contractor C & G Drilling Company - Rig 1 Drill Collar Length 178 ft I.D. 2 1/4 in.  
Mud Type Chemical Viscosity 53 Weight Pipe Length \_\_\_\_\_ ft I.D. \_\_\_\_\_ in.  
Weight 9.3 Water Loss 7.6 cc. Drill Pipe Length 1,976 ft I.D. 3 in.  
Chlorides 880 P.P.M. Test Tool Length 33 ft Tool Size 3 1/2-IF in.  
Jars: Make Sterling Serial Number 4 Anchor Length 10 ft. 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-FH in.

Blow: 1st Open: Weak, surface blow increasing to 1 3/4 ins. in 30 mins. No blow back during shut-in.  
2nd Open: No blow increasing to 1 in. in 60 mins. No blow back during shut-in.

Recovered 35 ft. of clean oil = .172200 bbls. (Grind out: 100%-oil) Gravity: 29 @ 60°  
Recovered 10 ft. of oil cut mud = .049200 bbls. (Grind out: 19%-oil; 81%-mud)  
Recovered 45 ft. of TOTAL FLUID = .221400 bbls.  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_  
Recovered \_\_\_\_\_ ft. of \_\_\_\_\_

Remarks Tool Sample Grind Out: 13%-oil; 87%-mud  
Diesel in bucket.

Time Set Packer(s) 6:52 A.M. Time Started off Bottom 9:52 A.M. Maximum Temperature 89°  
Initial Hydrostatic Pressure.....(A) 1058 P.S.I.  
Initial Flow Period.....Minutes 30 (B) 9 P.S.I. to (C) 16 P.S.I.  
Initial Closed In Period.....Minutes 30 (D) 743 P.S.I.  
Final Flow Period.....Minutes 60 (E) 16 P.S.I. to (F) 26 P.S.I.  
Final Closed In Period.....Minutes 60 (G) 749 P.S.I.  
Final Hydrostatic Pressure.....(H) 1049 P.S.I.

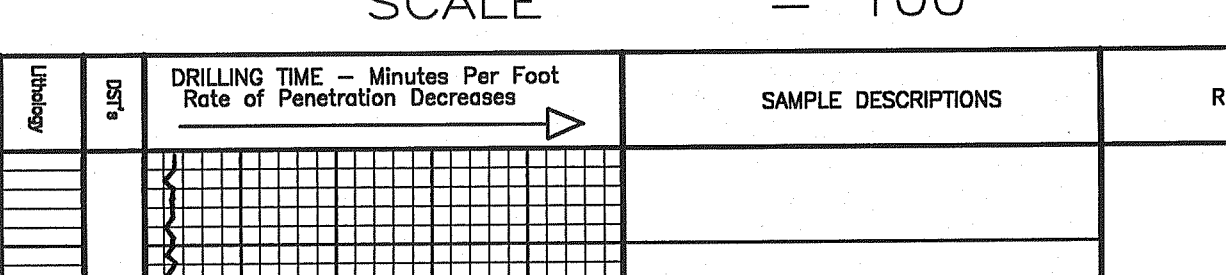
# GEOLOGIST'S REPORT

DRILLING TIME AND SAMPLE LOG

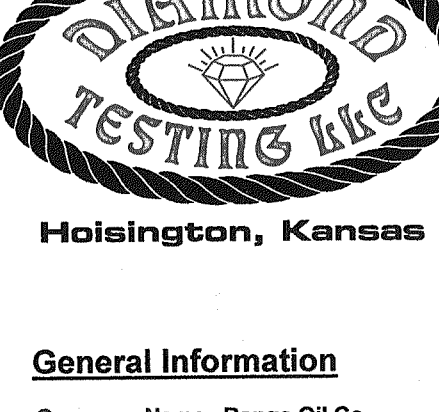
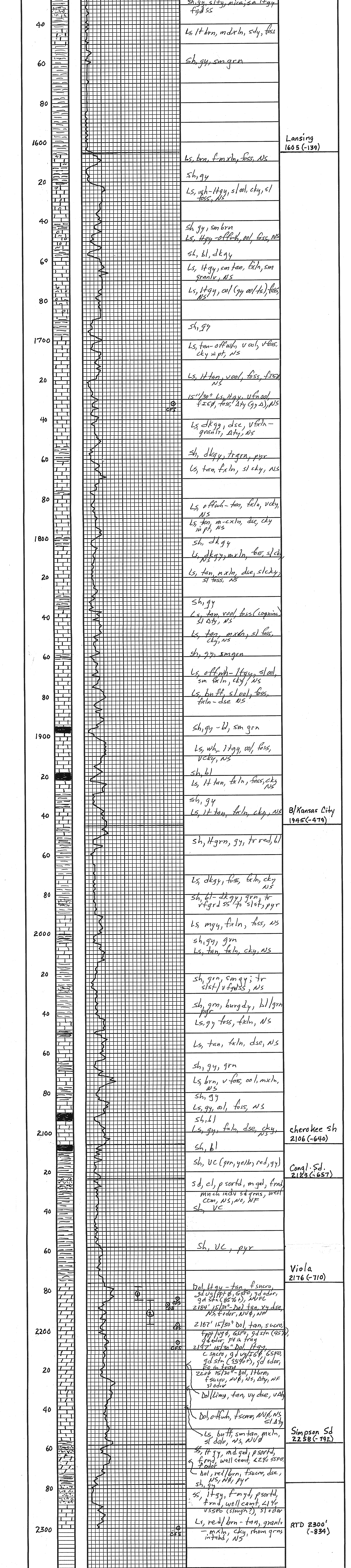
COMPANY Range Oil Co., Inc.  
 LEASE Madden Unit #3  
 FIELD Panther Ranch SW  
 LOCATION 2142 EWL + 1530 EWL, NW1/4  
 SEC 31 T19S R19E G6E  
 COUNTY Chase STATE KS  
 CONTRACTOR C+G Drilling Co. Rig #1  
 SPUD 11-17-14 COMP 11-23-14  
 RTD 2300' LTD 2298'  
 MUD UP 1500' TYPE MUD Chem  
 SAMPLES SAVED FROM 1570' TO R1-D  
 DRILLING TIME KEPT FROM 1500' TO RTD  
 SAMPLES EXAMINED FROM 1570' TO RTD  
 GEOLOGICAL SUPERVISION FROM 1600' TO RTD  
 GEOLOGIST ON WELL Ken Wallace  
 ELEVATIONS  
 KB 1466'  
 DE 1460'  
 CASING 8 5/8" 225' / 1805'  
 FROM K&B  
 MASONRY EMENTS ARE ALL  
 ELECTRICAL SURVEYS  
 BY GRI, J. Wallace  
 MEI

REMARKS Production pipe set to further evaluate Viola.  
 11-14-14 - MRET  
 11-17-14 - Preparing to drill surface hole  
 11-18-14 - Drig @ 255', 14" @ 216'  
 11-19-14 - Drig @ 1000', 14" @ 872'  
 11-20-14 - Drig @ 1716', 14" @ 1338'  
 11-21-14 - Drig @ 2104', 14" @ 1848'  
 11-22-14 - RTD 2197' Earning DST #2  
 11-23-14 - RTD 2300' Ran Pinner E-log; set 5 1/2" csg @ 2297' by 1805'. PD @ 9:03am

## LEGEND

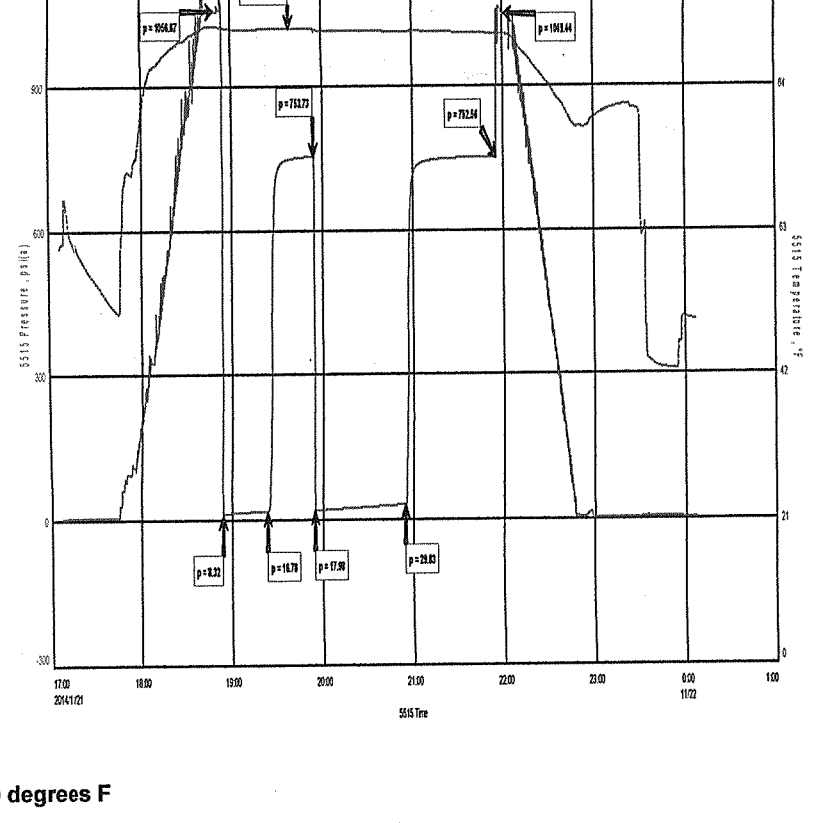


SCALE " = 100'



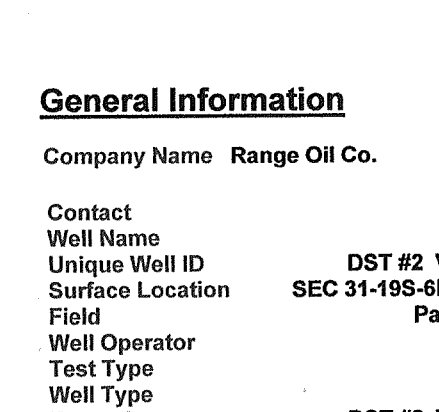
JACOB MCCALLIE  
620-627-7116  
mccallie.dtlc@gmail.com

**General Information**  
 Company Name Range Oil Co.  
 Contact John Washburn  
 Well Name Madden Unit #3  
 Unique Well ID DST #1 Viola 2178-2187  
 Surface Location SEC 31-19S-6E Chase County  
 Field Panther Ranch SW  
 Well Operator Range Oil Co.  
 Test Type Drill Stem Test  
 Well Type Vertical  
 Formation 01 Oil  
 Well Fluid Type Initial Test  
 Test Purpose (AEUB) 2014/11/22  
 Start Test Date 17:07:00  
 Final Test Date 2014/11/22  
 Job Number 00:07:00  
 Representative S0520  
 Prepared By Jacob McCallie  
 Report Date 2014/11/21



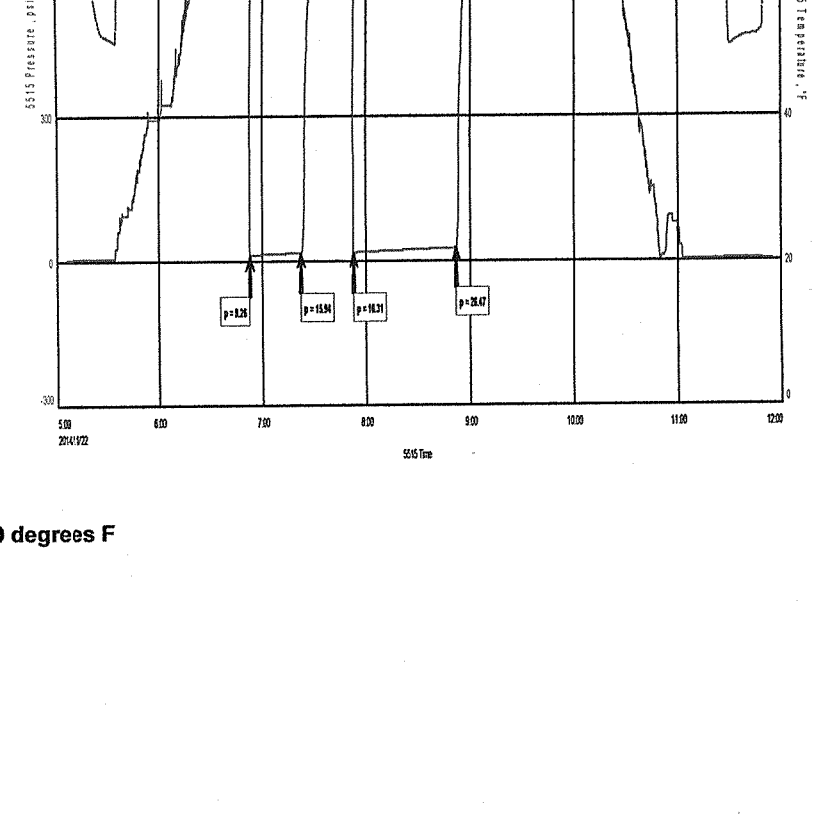
**FLUID RECOVERY**  
 45 CO 100% O GRAVITY: 29 @ 60 degrees F  
 10 OCM 27% O 73% M  
 55 TOTAL FLUID

**TOOL SAMPLE:**  
18% O 82% M



JACOB MCCALLIE  
620-627-7116  
mccallie.dtlc@gmail.com

**General Information**  
 Company Name Range Oil Co.  
 Contact John Washburn  
 Well Name Madden Unit #3  
 Unique Well ID DST #2 Viola 2187-2197  
 Surface Location SEC 31-19S-6E Chase County  
 Field Panther Ranch SW  
 Well Operator Range Oil Co.  
 Test Type Drill Stem Test  
 Well Type Vertical  
 Formation 01 Oil  
 Well Fluid Type Initial Test  
 Test Purpose (AEUB) 2014/11/22  
 Start Test Date 17:07:00  
 Final Test Date 2014/11/22  
 Job Number 00:06:00  
 Representative S0521  
 Prepared By Jacob McCallie  
 Report Date 2014/11/22



**FLUID RECOVERY**  
 35 CO 100% O GRAVITY: 29 @ 60 degrees F  
 10 OCM 18% O 81% M  
 45 TOTAL FLUID

**TOOL SAMPLE:**  
13% O 87% M