

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

OCD Artesia

FORM APPROVED
OMB NO. 1004-0137
Expires: October 31, 2014

WELL COMPLETION OR RECOMPLETION REPORT AND LOG

a. Type of Well Oil Well Gas Well Dry Other
 b. Type of Completion: New Well Work Over Deepen Plug Back Diff. Resvr.,
 Other: CONVERT TO SWD SWD-1368

5. Lease Serial No.
NM030752

6. If Indian, Allottee or Tribe Name

7. Unit or CA Agreement Name and No.

2. Name of Operator
RAY WESTALL OPERATING, INC.

8. Lease Name and Well No.
EMPIRE A FEDERAL #2 (39808)

3. Address P.O. BOX 4, LOCO HILLS, NM 88255

3a. Phone No. (include area code)
(575) 677-2370

9. API Well No.
30-015-29618 S2

4. Location of Well (Report location clearly and in accordance with Federal requirements)*
At surface UL - H, S27, T18S, R29E 1650' FNL & 660' FEL

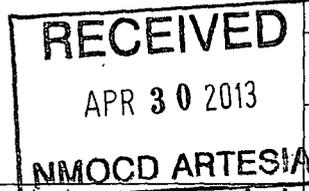
10. Field and Pool or Exploratory
SWD WOLFCAMP/CANYON

11. Sec., T., R., M., on Block and Survey or Area
UL - H 27 18S 29E

At top prod. interval reported below

12. County or Parish EDDY 13. State NM

At total depth



14. Date Spudded

16. Date Completed
 D & A Ready to Prod. 3/26/13

17. Elevations (DF, RKB, RT, GL)*
GR 3434'

18. Total Depth: MD
TVD 11404'

19. Plug Back T.D.: MD
TVD 9917'

20. Depth Bridge Plug Set: MD
TVD 11124'

21. Type Electric & Other Mechanical Logs Run (Submit copy of each)

22. Was well cored? No Yes (Submit analysis)
Was DST run? No Yes (Submit report)
Directional Survey? No Yes (Submit copy)

23. Casing and Liner Record (Report all strings set in well)

Hole Size	Size/Grade	Wt. (#/ft.)	Top (MD)	Bottom (MD)	Stage Cementer Depth	No. of Sks. & Type of Cement	Slurry Vol. (BBL)	Cement Top*	Amount Pulled
17 1/2	13 3/8 J-55	48#	SURFACE	330'		365 SXS		SURFACE	NONE
12 1/4	8 5/8 J-55	36#	SURFACE	3200'		1335 SXS		SURFACE	NONE
7 7/8	5 1/2 P110	17#	SURFACE	11401'		250 SXS		10416'	NONE
	N-80								
03/05/13	squeeze	annulus	from	9960'		700 SXS	CLASS H	4274'	NONE

24. Tubing Record

Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)	Size	Depth Set (MD)	Packer Depth (MD)
2 7/8	9024'	9029'						

25. Producing Intervals

Formation	Top	Bottom	Perforated Interval	Size	No. Holes	Perf. Status
A) WOLFCAMP/CANYON	9091'	9895'	9091-9107, 9132-40			
B)			9230-40, 9270-80			
C)			9615-32, 9732-40			
D)			9755-68, 9882-95	4 SPF	388	OPEN

26. Perforation Record

27. Acid, Fracture, Treatment, Cement Squeeze, etc.

Depth Interval	Amount and Type of Material
9091'-9895'	20,000 GAL 15% HCL NEFE ACID

28. Production - Interval A

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

28a. Production - Interval B

Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
			→						

FOR RECORD

APR 28 2013

BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

*(See instructions and spaces for additional data on page 2)

Non-well Prod for reporting sale of skim oil is 2837065 gal

28b. Production - Interval C

Date First Produced	Test Date	Hours Tested	Test Production ➔	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate ➔	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

28c. Production - Interval D

Date First Produced	Test Date	Hours Tested	Test Production ➔	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate ➔	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status	

29. Disposition of Gas (Solid, used for fuel, vented, etc.)

30. Summary of Porous Zones (Include Aquifers):

Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.

31. Formation (Log) Markers

Formation	Top	Bottom	Descriptions, Contents, etc.	Name	Top
					Meas. Depth

32. Additional remarks (include plugging procedure):

33. Indicate which items have been attached by placing a check in the appropriate boxes:

- Electrical/Mechanical Logs (1 full set req'd.)
 Geologic Report
 DST Report
 Directional Survey
 Sundry Notice for plugging and cement verification
 Core Analysis
 Other:

34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*

Name (please print) Rene Hope Title Bookkeeper
 Signature *Rene Hope* Date 3/28/13

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

EMPIRE A FEDERAL # 2

02/27/13 – MOVE IN RIG UP PULLING UNIT. COME OUT OF HOLE WITH TUBING AND PACKER. LAY DOWN 2 3/8 TUBING.

02/28/13 – GO IN HOLE WITH 2 7/8 WORK STRING FROM RACKS AND C.I.B.P. NOTIFIED PAUL SWARTZ WITH BLM. HE SAID WE COULD SET C.I.B.P. AND HE WOULD VERIFY WHEN HE CAME TO LOCATION ON 03/01/13 TO SPOT CEMENT PLUG. WE SET C.I.B.P AT 11124'. SHUT DOWN

03/01/13 – TAG C.I.B.P. AT 11124'. WITNESSED AND TUBING TALLY VERIFIED BY PAUL SWARTZ/BLM. SPOT CEMENT PLUG FROM 11124' TO 10686'. SEE ATTACHED. WITNESSED SPOTTING OF PLUGS BY PAUL SWARTZ/BLM. COME OUT OF HOLE. SHUT DOWN. W.O.C.

03/04/13 – PERFORATE SQUEEZE HOLES (4) AT 9960' (JUST ABOVE T.O.C). TAGGED CEMENT AT 10578' WITH WIRELINE. GO IN HOLE WITH RETAINER AND TUBING, SET RETAINER AT 9932', SHUT DOWN.

03/05/13 – RIG UP PAR FIVE TO CEMENT SQUEEZE ANNULUS OF 5 1/2 " CASING.SEE ATTACHED. COME OUT OF HOLE WITH TUBING, SHUT DOWN.

03/06/13 – WORK ON CEMENT.

03/07/13 – RIG UP JARREL SERVICES TO RUN CBL. TAGGED CEMENT AT 9917' RAN CBL (COPY SENT TO BLM ATTN: PAUL SWARTZ) ESTIMATED TOP OF CEMENT AT 4274'. GO IN HOLE TO PERFORATE 9882-95 (52 HOLES), 9755-68 (52 HOLES), 9732-40 (32 HOLES), 9615-32 (68 HOLES), 9270-80 (40 HOLES), 9230-40 (40 HOLES), 9132-42 (40 HOLES), 9091-9107 (64 HOLES). GO IN HOLE WITH TUBING. RBP AND PACKER. SHUT DOWN.

03/08/13 – SET RBP AT 9914' – PACKER AT 8993'. START SWABBING, SWAB WELL DRY TO S.N. IN 12 RUNS. WAIT 1 HOUR, HOLD 200' FLUID ENTRY – ALL WATER – NO GAS OR OIL. WAIT 1 HOUR, HAD 200' FLUID ENTRY – ALL WATER – NO OIL OR GAS. SHUT DOWN.

03/11/13 – RIG UP ELITE WELL SERVICES TO ACIDIZE PERFS WITH 20,000 GALLONS 15% NEFE ACID. HAD TUBING LEAK. COME OUT OF HOLE, FOUND BAD COLLAR ON TUBING. SHUT DOWN.

03/12/13 – GO IN HOLE WITH TUBING AND PACKER TO 8993'. ACIDIZE WELL. AUG RATE 5.3 BPM AT 3730 PSI. ISDP 2963 PSI.

03/13/13 – FLOW DOWN, COME OUT OF HOLE WITH TUBING, PACKER AND RBP. LAY DOWN WORK STRING. SHUT DOWN.

03/14/13 – GO IN HOLE WITH PACKER, PROFILE NIPPLE, ON-OFF TOOL AND I.P.C (SALTA LINED) TUBING. SET PACKER AT 9029' (TOP PERF AT 9091') PUMP 2% KCL FLUID WITH PACKER FLUID.

EMPIRE A FEDERAL # 2 CONTINUED

03/14/13 - PRESSURE ANNULUS TO 500 PSI – HELD OK. FLANGE UP WELL HEAD. RIG DOWN PULLING UNIT, MOVE OFF WELL.

03/22/13 – CALLED PAUL SWARTZ WITH BLM TO SCHEDULE M.I.T ON 03/26/13.

03/26/13 – PERFORM M.I.T. TEST ON WELL. PRESSURE TESTED ANNULUS TO 500 PSI – HELD OK. TEST WITNESSED BY PAUL SWARTZ WITH BLM. COPY OF CHART RECORDING ATTACHED. WELL READY TO START INJECTING.

B.M

DESIGN – EXECUTE – EVALUATE – REPORT

SQUEEZE

RAY WESTALL OPERATING

**EMPIRE A FED #2
EDDY COUNTY, NEW MEXICO**

Prepared By: DAVID D BRAY

FIELD SPECIALIST

ARTESIA DISTRICT

3-5-2013

PAR FIVE ENERGY SERVICES LLC

Cementing Service
Report

Treatment Number 00002172	Date: 3-5-2013
STAGE	API NO

WELL NAME AND NO.: EMPIRE A FED #2	LOCATION(LEAGAL)	RIG NAME:
FIELD/	FORMATION	PO#
COUNTY/P ARIS H: EDDY	STATE: NM	AFE. NO
NAME: RAY W:STALOPERATING INC		WELL DATA: BOTTOM TOP
AND		BIT SIZE CSG/Uner Size 5 1/2
ADDRESS		T.D. WEIGHT 17#
SPECIAL INSTRUCTIONS		ROT CABLE FOOTAGE 9960
SQUEEZE		GRADE J-55
IS CASING/TUBING SECURED? YES NO		MUD-TYPE THREAD
LIFT PRESSURE PSI		MUD DENSITY LESS FOOTAGE SHOE JOINT(S)
PRESSURE LIMIT PSI		MUD VISC Disp. Capacity 57.5
BUMP PLUG TO +/- 500 PSI		TOTAL 57.5

ZIP CODE	NOTE: Include Footage From Ground Level To Head In Disp. Capacity
STAGE TOOL	TYPE
DEPTH	DEPTH
TYPE	DEPTH
DEPTH	DEPTH
TBG D.P.	SQUEEZE JOB
SIZE: 2.875	TYPE: RETAINER
WEIGHT: 6.5	DEPTH: 9633
GRADE: J-55	TAIL PIPE: SIZE DEPTH
THREAD	TUBING VOLUME 57.5 Bbls
NEW USED X	CASING VOL. BELOW TOOL .6 Bbls
DEPTH: 9933	TOTAL 58 Bbls
No. of Centralizers	ANNUAL VOLUME 151 Bbls

TIME	0001	PRESSURE	VOLUME PUMPED bbl	08:00	DATE: 3-5-2013	TIME:	ARRIVED ON LOCATION	LEFT LOCATION	DATE: 3-5-2013
TO 2400	TBG	CASING	INCREMENT	CUM	INJET RATE	FLUID TYPE	FLUID DENSITY	SERVICE LOGE DETAIL	
7:00	XXX							ON LOC RIG UP ON GROUND	
8:00	XXX							SAFETY MEETING, START JOB	
8:16	XXX	5200	0.5		0.5	F/W	8.34	TEST LINES	
8:18	XXX	800	20		2.5	F/W	8.34	MUD PUSH	
8:40	XXX	800	10		2.5	F/W	8.34	WATER SPACER	
8:50	XXX	0	201		2.5	CMT	12.9	LEAD CEMENT	
10:18	XXX	0	21		3	CMT	15.6	TAIL CEMENT	
10:29	XXX	800	57.5		3	F/W	8.34	DISPLACEMENT	
10:55	XXX				0	F/W	8.34	SHUT DOWN	
11:06	XXX	1100	120		3.5	F/W	8.34	REVERSE OUT	
XXX									
XXX									
XXX									
XXX									
XXX									
XXX									
XXX									
XXX								THANK YOU FOR USING PAR FIVE SERVICES!!!!	

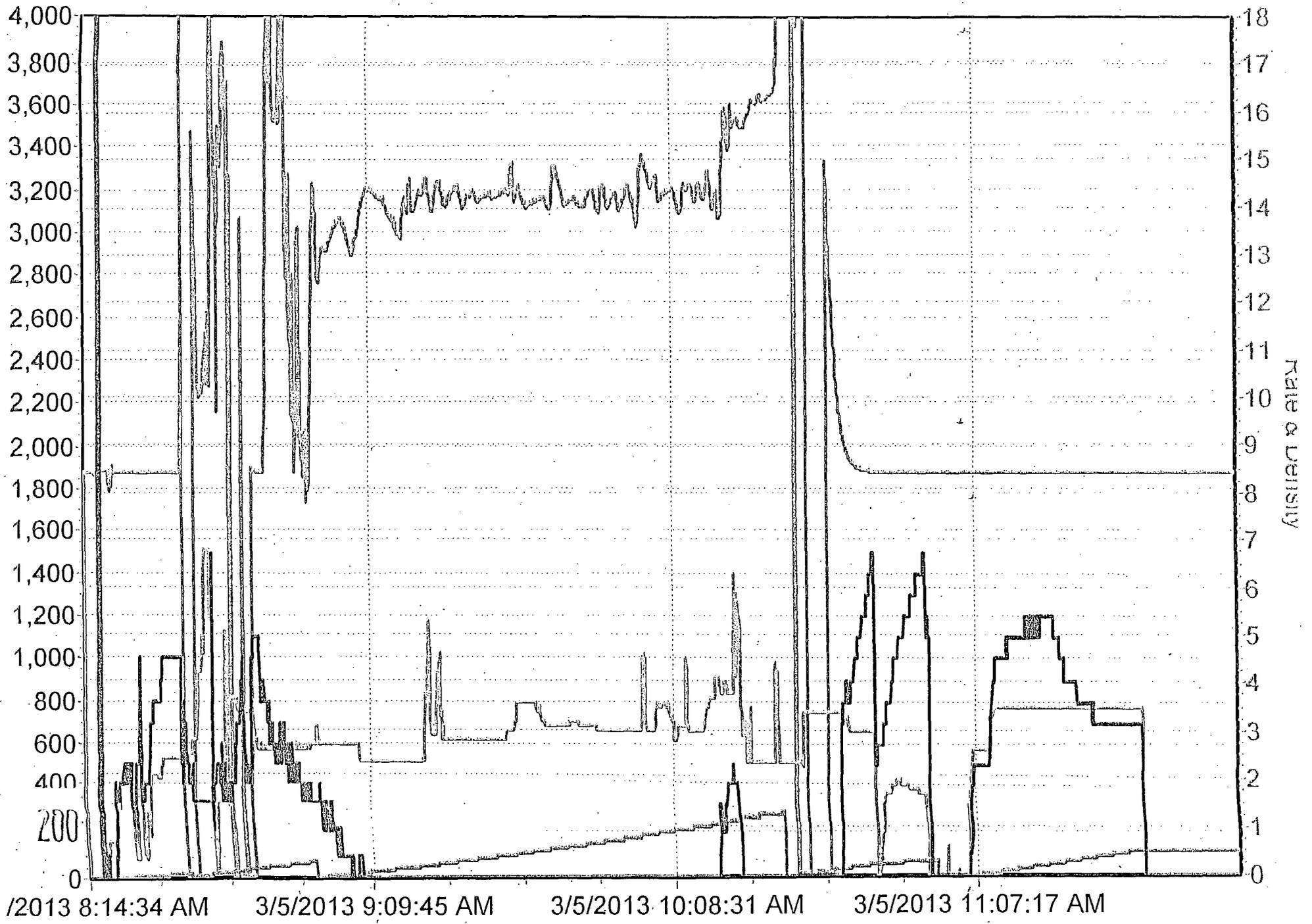
REMARKS

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
							BBLs	DENSITY
1	600	1.89	35/65 POZ/H + 5%PF44 + 6%PF20 + 0.3%PF13 + 0.125ppsPF29 + 0.25ppsPF46				202	12.9
2	100	1.18	H + 0.3%PF13				21	15.6
3								
4			200# SUGAR					
5			20 BBLs PF827					
6								

BREAKDOWN FLUID TYPE		VOLUME		DENSITY		PRESSURE					
HESITATION SQ.		RUNNING SQ.		CIRCULATION LOST		YES	NO	500	MAX.	0	MIN.
								Cement Circulated To Surf. Yes No			
Washed Thru Perfs Yes No		TO	FT.	MEASURED DISPLACEMENT		WIRELINE		TYPE OF WELL	OIL GAS	STORAGE INJECTION	BRINE WATER WILDCAT
PERFORATIONS		TO TO		CUSTOMER REPRESENTATIVE							
TO TO				DONNIE MATHS				DAVID D BRAY			

M/D TOTCO 2000 SERIES

— Density — Total Rate — Total Volume — Total Pressure



DESIGN – EXECUTE – EVALUATE – REPORT

PLUGGING

**RAY WEASTALL OPERATION.INC
EMPIRE A FEDERAL#2
EDDY COUNTY, NM**

**Prepared By: Anthony Granados
, And Robert Nunez**

FIELD SPECIALIST

ARTESIA DISTRICT

3/1/2013

Cementing Service Report

Treatment Number 2300	Date 3-1-13
API. NO	

WELL NAME AND NO. EMPIRE A FEDERAL #2	LOCATION(LEGAL)	WELL DATA:			
FIELD/POOL	FORMATION	PO#	BOTTOM		TOP
COUNTY/PARISH EDDY	STATE NM	AFE, NO	BIT SIZE	CSG/Liner Size	2 7/8 5 1/2
NAME RAY V. EASTALL OPERATING, INC			TOTAL DEPTH	WEIGHT	17
AND			ROT CABLE	FOOTAGE	11,120
ADDRESS			GRADE		
SPECIAL INSTRUCTIONS			MUD TYPE	THREAD	
ZIP CODE			MUD DENSITY	LESS FOOTAGE SHOE JOINT(S)	
SET PLUG AS PER-COMPANY.REP			MUD VISC	Disp. Capacity	60
IS CASING/TUBING SECURED? YES <input checked="" type="checkbox"/> NO			NOTE: Include Footage From Ground Level To Head In Disp. Capacity		
LIFT PRESSURE PSI			TOTAL		
PRESSURE LIMIT PSI			60		
BUMP PLUG TO PSI			60		

TUBING		D.P.		SQUEEZE JOB	
SIZE		TOOL	TYPE squeeze		
WEIGHT			DEPTH		
GRADE		TAIL PIPE: SIZE	DEPTH		
THREAD					
NEW USED		CASING VOL. BELOW TOOL	Bbls		
DEPTH		TOTAL	Bbls		
No. of Centralizers		ANNUAL VOLUME		Bbls	

TIME TO 2400	PRESSURE		VOLUME PUMPED BBL		JOB SCHEDULED FOR			TIME	ARRIVED ON LOCATION		LEFT LOCATION	
	TBG OR D.P.	CASING	INCREMENT	CUM	INJET RATE	FLUID TYPE	FLUID DENSITY		TIME: 8:00AM DATE: 3-1-13	TIME: 12:00 DATE: 3-1-13		
8:14	2000	XXX					FW	8.33	SERVICE LOGE DETAIL			
8:15	500	XXX					FW	8.33	PRE-JOB SAFETY MEETING			
8:15	1000	XXX				2	FW	8.33	PERSURE TEST LINS			
9:18	1452	XXX		120			FW	8.33	500 PSI TUBING			
9:18	660	XXX					CMT	15.6	PUMP 120 BBLS FW			
9:27	500	XXX		12		2	CMT	15.6	END 120 BBLS FW			
9:27	486	XXX					FW	8.33	START 15.6 CMT			
9:52	624	XXX		59		2	FW	8.33	END 15.6 CMT			
10:30	500	XXX					FW	8.33	START FW DISP			
11:00	782	XXX					FW	8.33	END FW DISP			
									RV CIR 110 BBLS			
									END RV CIR 2 BBLs = 9 SKS			

SYSTEM CODE	NO. OF SACKS	YIELD CU. FT/SK	COMPOSITION OF CEMENTING SYSTEMS				SLURRY MIXED	
			H+1%PF65+.3%PF13				BBLs	DENSITY
1	60	1.18					12	15.6
2								
3								
4								
5								
6								

BREAKDOWN FLUID TYPE		VOLUME		DENSITY		PRESSURE		MAX.		MIN.	
HESITATION SQ.		RUNNING SQ.		DISPLACEMENT VOL		Cement Circulated To Surf.		Yes		xx No	
Washed Thru Perfs		PSI	FINAL	PSI	MEASURED DISPLACEMENT	WIRELINE		TYPE OF WELL		STORAGE BRINE WATER	
TO		TO	CUSTOMER REPRESENTATIVE		ANTHONY GRANADOS		GAS INJECTION		WILDCAT		

Customer: Ray Westall Operating, Inc
Well Name: Empire A Federal #2
County: Eddy State: NM
Rig:
Requested By: Chris DeLeon

MD: 11124
TVD: 11124
BHST: 169
BHCT: 133

Report Date: March 01 2013
Stage: Plug
String: Plug
Blend Type: Field Blend
Reported By:

Slurry Information

Density: 15.60 ppg Yield: 1.18 cuft/sk Mix Fluid: 5.216 gal/sk

Slurry Composition

Cement Blend: Class H

PF-0E5 0.10% BWOB Cement Dispersant 04110
PF-013 0.30% BWOB Cement Retarder MM01C-2152B

Rheology (Average Readings)

Temp	3	6	100	200	300	PV	YP
80 °F	3.5	4	15.5	26	39	35.25	3.75
169 °F	12	16.5	28	35	40	18	22

Thickening Time

POD	30 Bc	50 Bc	70 Bc	100 Bc	<input type="checkbox"/>	Batch Time
3:47	3:58	4:08	4:14			0

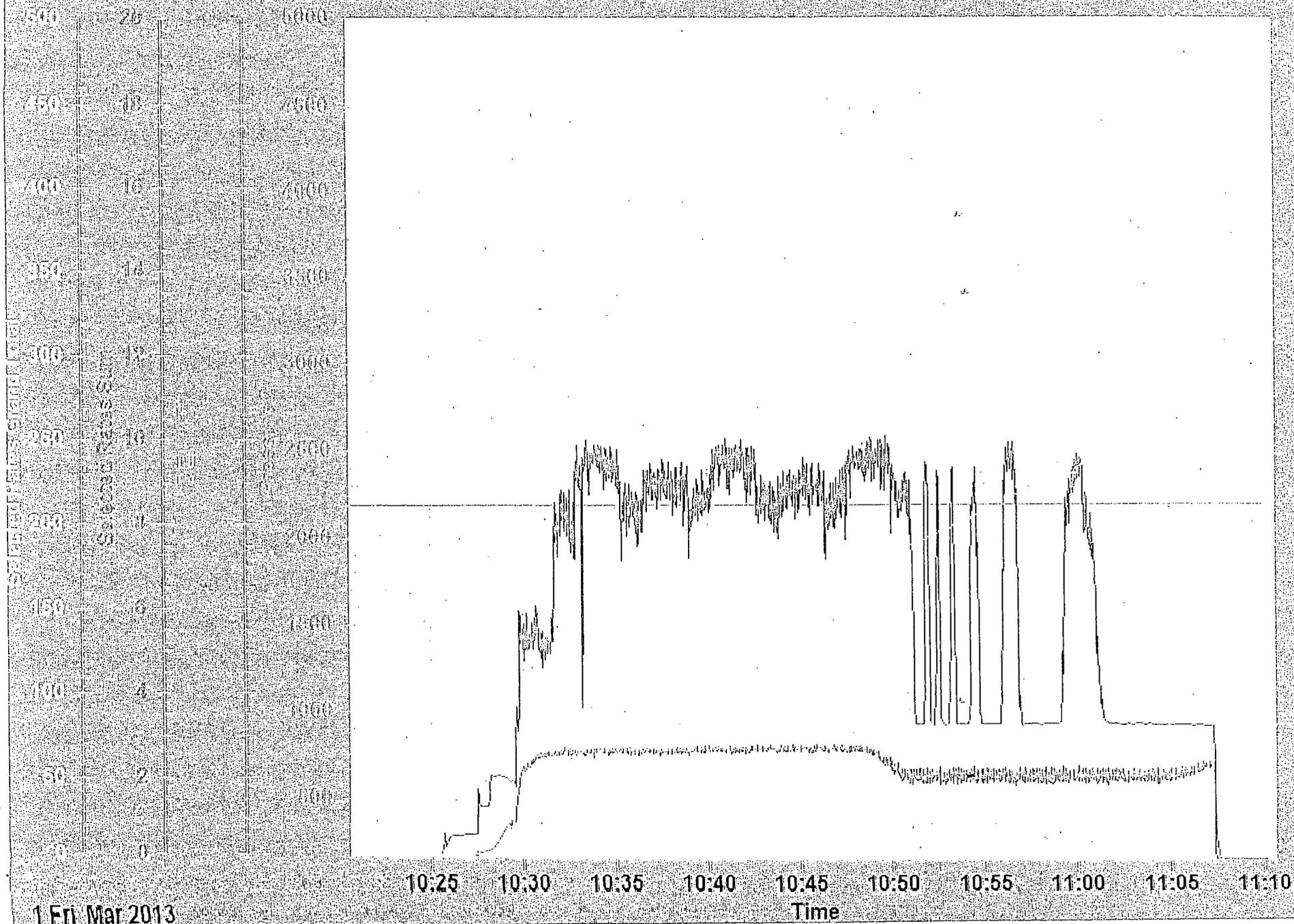
Thickening Time does not include batch time.

Free Fluid

Temp	Incl.	ml Collected	Start Time	Stop Time
169 °F	0	2 ml/250	7:45	9:45

Comments

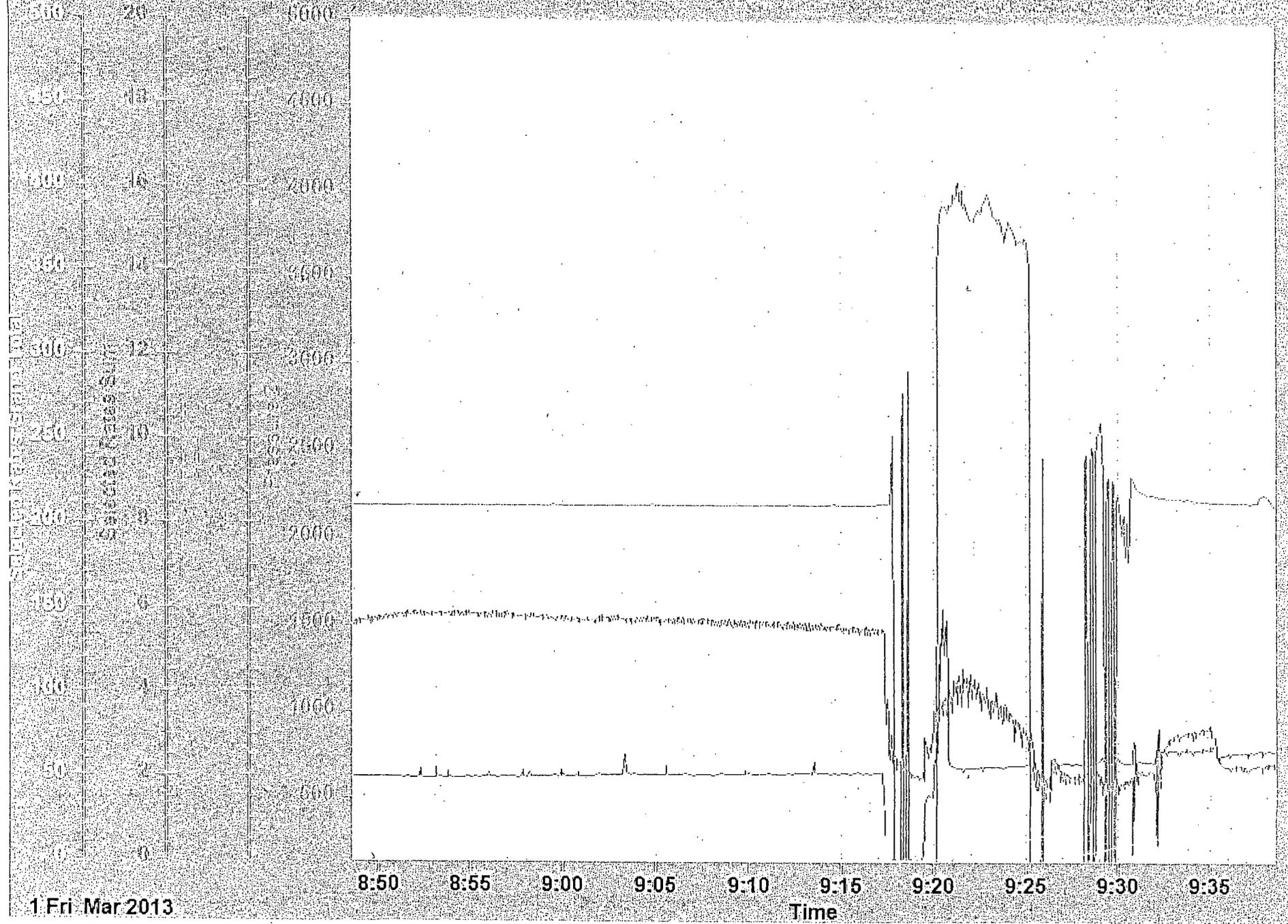
Plot



1 Fri Mar 2013

Time

Plot



1 Fri Mar 2013

Time

