

Submit 1 Copy To Appropriate District Office
District I – (575) 393-6161
1625 N. French Dr., Hobbs, NM 88240
District II – (575) 748-1283
811 S. First St., Artesia, NM 88210
District III – (505) 334-6178
1000 Rio Brazos Rd., Aztec, NM 87410
District IV – (505) 476-3460
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
Revised July 18, 2013

SUNDRY NOTICES AND REPORTS ON WELLS (DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)		WELL API NO. 30-015-43841
1. Type of Well: Oil Well ☐ Gas Well ☒ Other		5. Indicate Type of Lease STATE ☒ FEE ☐
2. Name of Operator RKI Exploration and Production, LLC		6. State Oil & Gas Lease No.
3. Address of Operator 3500 One Williams Center MD 35 Tulsa, OK 74172		7. Lease Name or Unit Agreement Name <i>Cadern 16 State</i>
4. Well Location Unit Letter <i>L</i> : 2310 feet from the S line and 200 feet from the W line Section 16 Township 23S Range 27E NMPM Eddy County		8. Well Number 001H
11. Elevation (Show whether DR, RKB, RT, GR, etc.) 3157 GR		9. OGRID Number 246289
		10. Pool name or Wildcat <i>647803 Forehand Ranch; Wolfcamp (Bas)</i>

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:		SUBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK ☐	PLUG AND ABANDON ☐	REMEDIAL WORK ☐	ALTERING CASING ☐
TEMPORARILY ABANDON ☐	CHANGE PLANS ☐	COMMENCE DRILLING OPNS. ☐	P AND A ☐
PULL OR ALTER CASING ☐	MULTIPLE COMPL ☐	CASING/CEMENT JOB ☒	
DOWNHOLE COMMINGLE ☐			
CLOSED-LOOP SYSTEM ☐			
OTHER: ☒		OTHER: ☐	

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 19.15.7.14 NMAC. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Intermediate casing set 8/15/2016

PJR attached

Hole size: 12 1/4"; Casing size: 9 5/8"; Depth 2108'; Weight: 40; Grade: J55
590 sxks - class C - 390 sxks lead @ 12.9 ppg; 200 sxks tail @ 14.8 ppg
Circulated 143 skxs to surface

NM OIL CONSERVATION
ARTESIA DISTRICT
AUG 25 2016

RECEIVED

Spud Date:

8/11/2016

Rig Release Date:

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE *Ashlee Fechino* TITLE *Regulatory Specialist* DATE *8/18/2016*

Type or print name *Ashlee Fechino* E-mail address: *ashlee.fechino@wpenergy.com* PHONE: *539.573.0212*

For State Use Only

APPROVED BY: *Karen Sharp* TITLE *Bus Oper Spec Adv* DATE *8-30-16*
Conditions of Approval (if any):

PAR FIVE
ENERGY SERVICES LLC

DESIGN - EXECUTE - EVALUATE - REPORT

INTERMEDIATE

WPX ENERGY

CAVERN STATE 16 # 1 H

EDDY COUNTY, NEW MEXICO

PRIMARY PUMP: 2001

SECONDARY PUMP:

PREPARED BY: ROBERT NUNEZ

SERVICE SUPERVISOR

ARTESIA DISTRICT

1-575-748-8610

8/15/2016

NM OIL CONSERVATION

ARTESIA DISTRICT

AUG 25 2016

RECEIVED

**ENERGY SERVICES LLC**

Field Ticket: TKT00005681

Date of Job: 08/15/2016	District: Artesia	New Well / Old Well: New Well
Customer: WPX Energy	Well #: Cavern State 16 #1H	
Address: PO Box 21358	County: Eddy	State: New Mexico
City: Tulsa	State: Oklahoma	Field: API#: 30-015-43841
Zip Code: 74121-1358	On Road Miles:	Off Road Miles:
Contact Person/Companyman: Mr. Preston Wray	Salesman: Chris DeLeon	
Contact Number: 1-405-435-0089	Service Supervisor: Anthony Granados	
Rig Contractor: Orion	Tractor:	Trailer:
Rig Number: 10	Equipment Operators:	
Head & Manifold: 9 5/8 Intermediate	David Chavarria Jose Reyes Roberto Nunez	
Job Type: Casing		

Description	Quantity	List Price	Extended Price	Discount %	Net Amount
PF900 Dye*	20.00	5.78	115.50	69	35.81
Field Support Work	1.00	1,500.00	1,500.00	0	1,500.00
Mileage Charge, all other equipment, per mile*	120.00	6.93	831.60	69	257.80
Cars, pickups, monitoring vehicles round trip*	120.00	4.62	554.40	69	171.86
PF-999 - Sugar*	200.00	4.62	924.00	69	286.44
Casing - 2001' - 4000*	1.00	4,000.00	4,000.00	69	1,240.00
Low Pressure Cement Plug Container*	1.00	924.00	924.00	69	286.44
Delivery Charge - Ton mileage, per ton mile*	1,740.00	3.00	5,220.00	69	1,618.20
Service Charges - Land jobs*	621.00	4.75	2,949.75	69	914.42
Class C, per cu. ft. (94lb/cu ft)	593.00	35.70	21,170.10	69	6,562.73
PF20 Bentonite Extender, per lb (60lb/cu ft)	1,450.00	0.56	806.92	69	250.14
PF001 Calcium Chloride, per lb (50lb/cu ft)	188.00	1.58	296.10	69	91.79
PF45 Defoamer Antifoam Agent, per lb	150.00	4.73	708.75	69	219.71
PF47 Liquid Antifoam Agent, per gal	5.00	86.62	433.12	69	134.27
PF29 Cellophane Flakes, per lb	48.00	6.07	291.31	69	90.31
PF424 Water Gelling Agent, per lb	100.00	9.82	981.75	69	304.34
Job Total					13,964.26

Ticket Notes**Cement Recipe**

2108' 12 1/4" Openhole 9 5/8" 40# Casing

CONTRACT CONDITIONS: (This agreement must be signed before work is commenced).

The undersigned, as authorized agent of the customer, agrees and acknowledges that the services, materials, products and supplies provided for this order shall be subject to the terms and conditions attached including indemnity and waiver of warranty provisions. No additional terms and conditions shall apply to this order.

Signed:

Well Owner, Operator, or Agent

Terms-Net
Payable on Receipt
Over 30Days, Discount Voids

Signature:

Mr. Eudasio Gai

TKT00005681

Emissions Regulation: 180 gallons Diesel used

PO#:

PAR FIVE

ENERGY SERVICES LLC

Service Order for Job: J00006974

Call Out Sheet Number: **CALL00006453**

Date of Job: 08-Aug-2016

District: Artesia

Time Well Ready: 10:35 am

Ready to Pump: 10:35 am

Customer: WPX Energy

DV Tool:

Job Stage Number: 1

Treat Down: Casing

Head & Manifold 9 5/8 Intermediate

Hole Size: 12 1/4

Well MD: 2108

Well TVD: 2108

BHST: 97

BHP:

BHCT: 87

Max Allowed Pressure:

New Well: New Well

Well #: Cavern State 16 #1H

County: Eddy

State: New Mexico

Legal Location: 99 999 999

Field:

Description:

API#: 30-015-43841

Salesman: Chris DeLeon

Contact Person/Companyman: Mr. Preston Wray

Contact Number: 1-405-435-0089

Email:

Rig Contractor: Orion

Rig Number: 10

Rig Phone: 1-281-436-6380

Max Allowed Ann Pressure:

Casing / Tubing

String Type	Depth	Size	Weight	Grade	Thread
Casing	2108	9 5/8	40	J55	8rd

Job Type

Casing

Service Supervisor: Granados Anthony

Sks/Gals.

Cement Type/Additives

Tractor

Trailer

Equipment Operators

590.00 Sack	Class C, per cu. ft. (94lb/cu ft)
1,466.00 Pound	PF20 Bentonite Extender, per lb (60lb/cu ft)
188.00 Pound	PF001 Calcium Chloride, per lb (50lb/cu ft)
159.00 Pound	PF45 Defoamer Antifoam Agent, per lb
49.00 Pound	PF29 Cellophane Flakes, per lb
100.00 Pound	PF424 Water Gelling Agent, per lb

Cement Recipe

2108' 12 1/4" Openhole 9 5/8" 40# Casing

20 Bbls Gel spacer (100# PF424)

390 sks C + 4% PF20 Bentonite + .4 pps PF45 Defoamer + .125 pps PF29 Cellophane
12.9# Yield 1.95 H2O 10.793

PF903: 94#
PF20: 3.76#
PF45: 4#
PF29: .125#

200 sks C + 1% PF1 Calcium
14.8# Yield 1.33 H2O 6.302

PF903: 94#
PF1: .94#

TAKE 7 IN 8 RND AND BUTTRESS FOR NEXT STRING
9 5/8 Head ETC
200# Sugar

(Signature)
8/11

Description	Quantity	Net Amount
Field Support Work	1.00	\$1,500.00
Mileage Charge, all other equipment, per mile*	120.00	\$257.79
Cars, pickups, monitoring vehicles round trip*	120.00	\$171.86
PF-999 - Sugar*	200.00	\$286.44

PAR FIVE

ENERGY SERVICES LLC

Description	Quantity	Net Amount
Casing - 2001' - 4000*	1.00	\$1,240.00
Low Pressure Cement Plug Container*	1.00	\$286.44
Delivery Charge - Ton mileage, per ton mile*	1,740.00	\$1,618.20
Service Charges - Land jobs*	618.00	\$910.00
Class C, per cu. ft. (94lb/cu ft)	590.00	\$6,529.53
PF20 Bentonite Extender, per lb (60lb/cu ft)	1,466.00	\$252.90
PF001 Calcium Chloride, per lb (50lb/cu ft)	188.00	\$91.79
PF45 Defoamer Antifoam Agent, per lb	159.00	\$232.89
PF29 Cellophane Flakes, per lb	49.00	\$92.18
PF424 Water Gelling Agent, per lb	100.00	\$304.34
Job Total:		\$13,774.36

Service Instructions

2108' 12 1/4" Openhole 9 5/8" 40# Casing

20 Bbls Gel spacer (100# PF424)

390 sks C + 4% PF20 Bentonite + 4 pps PF45 Defoamer + .125 pps
PF29 Cellophane
12.9# Yield 1.95 H2O 10.793

PF903: 94#
PF20: 3.76#
PF45: 4#
PF29: .125#



200 sks C + 1% PF1 Calcium
14.8# Yield 1.33 H2O 6.302

PF903: 94#
PF1: .94#

TAKE 7 IN 8 RND AND BUTTRESS FOR NEXT STRING
9 5/8 Head ETC
200# Sugar

Directions

US 285 to 62/180 stay on 62/180 T/L at Derrick Rd. T/R at Old Cavern Hwy for
2miles T/L thru locked Chevron gate (combo 1462) go 1 mile T/L 0.1 mile T/R 0.3
miles to location.

WELL SUMMARY



COMPANY NAME:	WPX ENERGY	DATE:	8/15/2016
LEASE NAME:	CAVERNS STATE 16 #	OPERATOR NAME:	WPX ENERGY
WELL NUMBER:	1H	TICKET NUMBER:	5681
API NUMBER:	30-015-43841	AFE NUMBER:	45189
SECTION: 16	TOWNSHIP: 23S	RANGE:	27E
COUNTY: EDDY	STATE:	NEW MEXICO	
RIG NAME: ORION 10	COMPANY REP:	PRESTON WRAY	PHONE#: 281-436-6380

DIRECTIONS

US 285 to 62/180 stay on 62/180 T/L at Derrick Rd. T/R at Old Cavern Hwy for 2miles T/L thru locked Chevron gate (combo 1462) go 1 mile T/L 0.1 mile T/R 0.3 miles to location.

NOTES

UPDATED BY SHANE WHITE 8/11/16
TAKE 7 IN 8 RD SWAGE FOR NEXT STRING

CIRCULATED 143 SACKS 50 BBLs OF CEMENT TO SURFACE

HSE

MAKE SUR ALL EMPLOYEES HAVE PROPER PPE

JOB PROCEDURE

PUMP 20 BBL GEL SPAVER
PUMP 390 SACKS LEAD SLURRY @ 12.9 PPG
PUMP 200 SACKS TAIL SLURRY @ 14.8 PPG
SHUT DOWN DROP PLUG
DISPLACE WELL

WELL SUMMARY

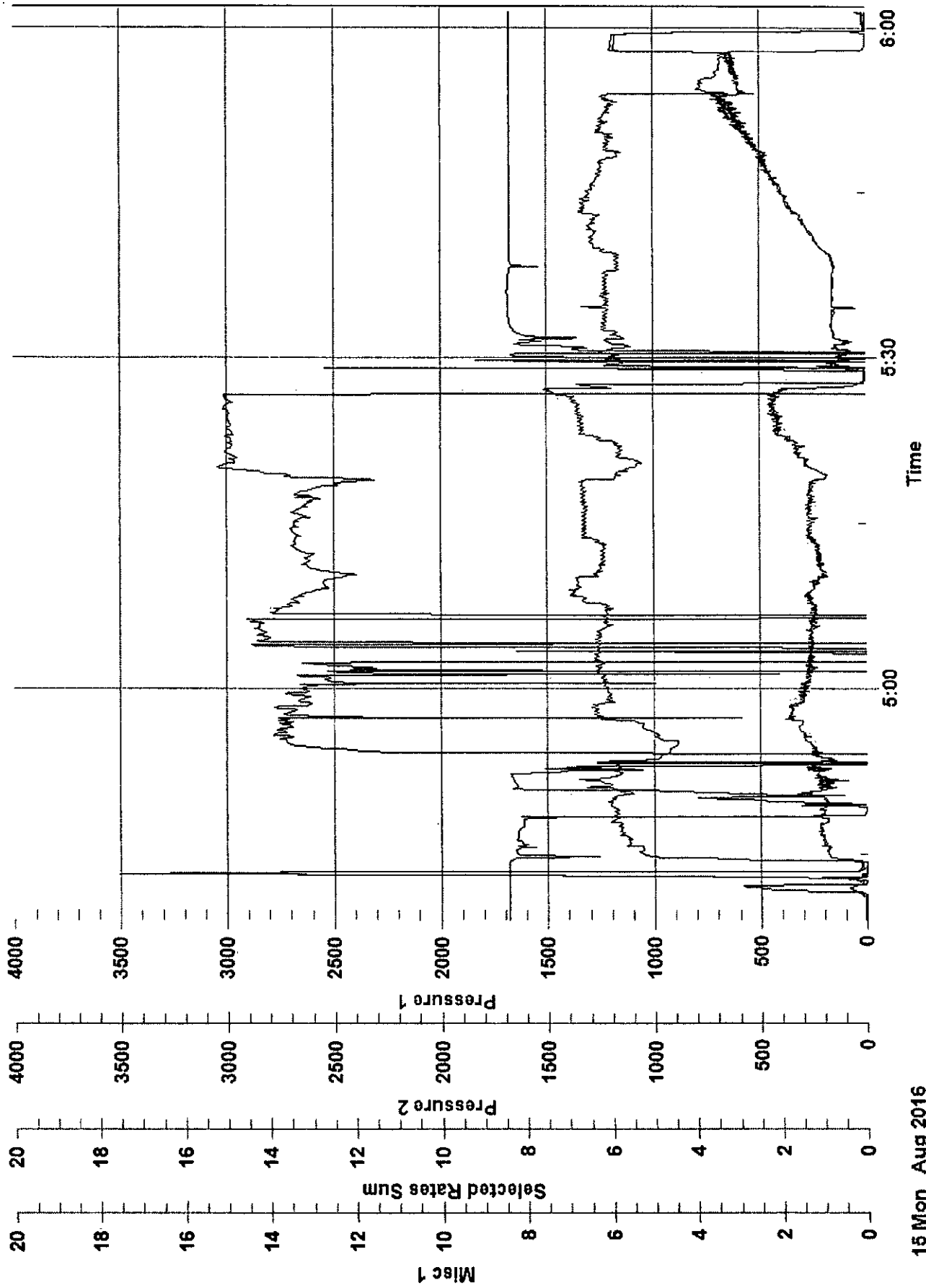


WELL/CASING DATA									
JOB TYPE: INTERMEDIATE					HOLE SIZE: 12.25				
TOTAL DEPTH: 2159					PREVIOUS CASING SIZE: 13.375				
PREVIOUS CASING LB/FT: 54.5					PREVIOUS CASING DEPTH: 450				
CASING SIZE: 9.625									
CASING LB/FT: 40					CASING GRADE: J55				
FLOAT COLLAR DEPTH: 2098.25					SHOE JOINT LENGTH: 45.19				
DV TOOL DEPTH:					SECOND DV TOOL DEPTH:				
TOTAL DEPTH: 2159					TOTAL CASING : 2143.44				
TUBULAR DATA									
TBG/D.P. SIZE:					TBG/D.P. DEPTH:				
TBG/D.P. LB/FT:					TOOL DEPTH:				
PACKER OR RETAINER:					PERF/HOLE DEPTH:				
SURFACE EQUIPMENT									
CEMENT HEAD SIZE:			9.625		QUICK CONNECT SIZE:			9.625	
DRILL PIN SIZE/TYPE:					THREAD:			8 ROUND	
TUBING SWEDGE SIZE:					TAKE 2 -2 INCH REGULAR TUBING SWEDGES				
CHEMICALS NEEDED									
TAKE 100 # PF-424 TAKE 200 # SUGAR									
EQUIPMENT									
SUPERVISOR:		Robert Nunez			FIELD REPRESENTATIVE:				
PUMP OPERATOR:		David Chavarria			UNIT NUMBER:		2001		
E/O:		Jose Reyes			UNIT NUMBER:		1003-2015		
E/O:		Jose Nevarez			UNIT NUMBER:		1016-2039		
E/O:					UNIT NUMBER:				
E/O:					UNIT NUMBER:				
FLUID DATA									
1ST SLURRY:		C + 4% PF20 Bentonite + .4 pps PF45 Defoamer + .125 pps PF29 Cellophane							
DENSITY:	12.9	YIELD:	1.95	MIX H2O:	10.793	SACKS:	390		
2ND SLURRY:		C + 1% PF1 Calcium							
DENSITY:	14.8	YIELD:	1.34	MIX H2O:	6.3	SACKS:	200		
3RD SLURRY:									
DENSITY:		YIELD:		MIX H2O:		SACKS:			
4TH SLURRY:									
DENSITY:		YIELD:		MIX H2O:		SACKS:			
5TH SLURRY									
DENSITY:		YIELD:		MIX H2O:		SACKS:			
DISPLACEMENT TYPE :				DISPLACEMENT VOLUME:			MUD WEIGHT:		

JOB LOG

[illegible]

WPX-INTERMEDIATE-2001





Par Five Energy Services, LLC
 11279 Lovington Hwy
 Artesia, NM
 Phone (575) 748-8610 Fax: (575) 748-8625

ART16-6453-01F

Customer: WPX Energy
 Well Name: Cavern State 16 #1H
 County: Eddy State: NM
 Rig: Orion 10
 Salesman: Chris DeLeon

MD: 2108
 TVD: 2108
 BHST: 97
 BHCT: 87

Report Date: August 10 2016
 Stage: Lead
 String: Intermediate
 Blend Type: Field Blend
 Reported By: Rodriguez, Sonny

Slurry Information

Density: 12.90 ppg Yield: 1.95 cuft/sk Mix Fluid: 10.793 gal/sk

Slurry Composition

Cement Blend: Class C

Additive	Conc	%	Design	Description	Lot Number
PF-020	4.00%		BWOB	Bentonite Gel	Bulk
PF-045	0.400	lb/sk	BWOB	Defoamer	201304AC
PF-029	0.125	lb/sk	BWOB	Cellophane	

Rheology (Average Readings)

Temp	3"	6"	100"	200"	300"	PV	YP
80 °F	17	25.5	49	53	57	12	45
87 °F	15	22	52	57	62	15	47

Thickening Time

Temp	POD	30 Bc	50 Bc	70 Bc	100 Bc	Batch Time
87 °F	3:14	3:39	4:02	4:51		0

Thickening Time does not include batch time.

Free Fluid

Temp	Incl	ml Collected	Start Time	Stop Time
87 °F	0	0 ml/250	11:06	11:26

UCA Compressive Strength

Temp	50 psi	500 psi	12 hr	24 hr	48 hr	72 hr
97	4:30	12:27	479	715		

Comments

The above data is for informational purposes, and Par Five Energy Services LLC, makes no guarantees or warranties, either expressed or implied, with respect to the accuracy or use of these data and interpretations.



Par Five Energy Services, LLC
11279 Lovington Hwy
Artesia, NM
Phone(575)748-8610 Fax: (575) 748-8625

ART16-6453-02F

Customer: WPX Energy	MD: 2108	Report Date: August 12 2016
Well Name: Cavern State 16 #1H	TVD: 2108	Stage: Tail
County: Eddy State: NM	BHST: 97	String: Intermediate
Rig: Orion 10	BHCT: 87	Blend Type: Field Blend
Salesman: Chris DeLeon		Reported By: Rodriguez, Sonny

Slurry Information

Density: 14.80 ppg Yield: 1.33 cuft/sk Mix Fluid: 6.302 gal/sk

Slurry Composition

Cement Blend: Class C

Additive	Conc	Design	Description	Lot Number
PF-001	1.00% %	BWOB	Calcium Chloride	364AD1732

Rheology (Average Readings)

Temp	3	6	100	200	300	PV	YP
80 °F	15	21.5	41	49.5	57	24	33
87 °F	14.5	22	49.5	61	71	32.25	38.75

Thickening Time

Temp	POD	30 Bc	50 Bc	70 Bc	100 Bc	Batch Time
87 °F	0:52	1:29	1:50	2:10		0

Thickening Time does not include batch time.

Free Fluid

Temp	Incl	ml Collected	Start Time	Stop Time
87 °F	0	0 ml/250	12:05	12:25

UCA Compressive Strength

Temp	50 psi	500 psi	12 hr	24 hr	48 hr	72 hr
97	2:47	5:51	1340	2022		

Comments

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