Office Office	State of New Mexico	Form C-103	
<u>District I</u> – (575) 393-6161	Energy, Minerals and Natural Resources	Revised July 18, 2013	
1625 N. French Dr., Hobbs, NM 88240		WELL API NO. 30-015-43841	
<u>District II</u> – (575) 748-1283 811 S. First St., Artesia, NM 88210	OIL CONSERVATION DIVISION	5. Indicate Type of Lease	
District III - (505) 334-6178	1220 South St. Francis Dr.	STATE FEE	
1000 Rio Brazos Rd., Aztec, NM 87410 <u>District IV</u> – (505) 476-3460	Santa Fe, NM 87505	6. State Oil & Gas Lease No.	
1220 S. St. Francis Dr., Santa Fe, NM			
87505 SUNDRY NOTICE	ES AND REPORTS ON WELLS	7. Lease Name or Unit Agreement Name	
	LIS TO DRILL OR TO DEEPEN OR PLUG BACK TO A		
	TION FOR PERMIT" (FORM C-101) FOR SUCH	Cavern State 16	
PROPOSALS.) 1. Type of Well: Oil Well G	as Well 🗸 Other	8. Well Number _{001H}	
2 Name of Operator		9. OGRID Number	
RKI Exploration	on and Production, LLC	246289	
3. Address of Operator	10. Pool name or Wildcat		
	illiams Center, MD 35, Tulsa, OK 74172		
4. Well Location	10	200	
Onit Letter	icet from the fine and .		
Section 16	Township 23S Range 27E	NMPH County Eddy	
	11. Elevation (Show whether DR, RKB, RT, GR, 3157 GR	etc.)	
	, , , , , , , , , , , , , , , , , , ,		
12 Charles	propriate Box to Indicate Nature of Noti	ice Report or Other Data	
12. Check Ap	propriate box to indicate nature of non	ice, report of Office Data	
NOTICE OF INT	ENTION TO: S	UBSEQUENT REPORT OF:	
PERFORM REMEDIAL WORK	PLUG AND ABANDON REMEDIAL W		
		DRILLING OPNS. P AND A	
	MULTIPLE COMPL	MENT JOB ☑	
DOWNHOLE COMMINGLE			
CLOSED-LOOP SYSTEM			
OTHER:	OTHER:	s, and give pertinent dates, including estimated date	
	x). SEE RULE 19.15.7.14 NMAC. For Multiple		
proposed completion or recon			
	•		
Liner was set 8/27/2016	5		
PJR Attached			
		NM OIL CONSERVATION	
6.125" Hole; Casing: 4.	.5"; Weight 13.5#; Depth 13,850';	ARTESIA DISTRICT	
Tubing 4"; Weight 14#;		SEP 06 2016	
<i>5</i> / <i>5 1</i>	•		
PUMP 445 SACKS Slu	arry @ 14.5 PPG	RECEIVED	
		Nave: 4 EM	
Spud Date: 08/11/2016	Rig Release Date: 08/29/201	16	
100			
rev R.Pr.			
I hereby certify that the information ab	ove is true and complete to the best of my knowl	ledge and belief.	
α α	2 (
SIGNATURE Cuptule fu	TITLE Permitting Tech I	DATE 09/01/2016	
$\overline{}$			
Type or print name Crystal Fulton	E-mail address: Crystal.Fulton@	@WPXEnergy.com PHONE: 539-573-0218	
For State Use Only			
A	Laura Kuallanda	A1.1 DATE 6/1/	
APPROVED BY WEND OF	harp TITLE DUS Upotypec.	-Udv DATE 9-6-16	
Conditions of Approval (if any):	• "		



ENERGY SERVICES LLC

DESIGN - EXECUTE - EVALUATE - REPORT

LINER

WPX ENERGY

Cavern State 16 #1H

Eddy County New Mexico

PRIMARY PUMP: SECONDARY PUMP:

2036 Josh Casillas 2001 David Chavarilla

PREPARED BY: Ruben Sanchez Jr

SERVICE SUPERVISOR
ARTESIA DISTRICT
1-575-748-8610

8/27/2016

WELL SUMMARY



ENERGY SERVICES LLC

			Wal	L//e/asing to	ANTĀ			
JOB TYPE: LINER				HOLE SIZE:		6.125	and the second s	
TOTAL DEPTH:	13,850			PREVIOUS (CASING SIZE		7	
PREVIOUS CASING LB/		29		PREVIOUS (9442	
CASING SIZE:	4.5							
CASING LB/FT:	13.5			CASING GR	ÁDE:	P110HC		
FLOAT COLLAR DEPTH	:5423			SHOE JOINT	LENGTH:	85		
DV TOOL DEPTH:	n/a			SECOND DV	/ TOOL DEP	TH:	n/a	
TOTAL DEPTH:	13,850	**		TOTAL CASI	NG :	5508		
			面。	JBULAR DAT	A	18.4		
TBG/D.P. SIZE:	4''			TBG/D.P. D		8290		
TBG/D.P. LB/FT:	14			TOOL DEPT	H:	5558.88		
PACKER OR RETAINER:				PERF/HOLE	DEPTH:			
			SURF	ACE EQUIPI	MENT			
CEMENT HEAD SIZE:		The state of the s		QUICK CON	INECT SIZE:			
DRILL PIN SIZE/TYPE:				THREAD:				
TUBING SWEDGE SIZE:		· · · · · · · · · · · · · · · · · · ·		TAKE 2 -2 II	NCH REGUL	AR TUBING	SWEDGES	
			CHE	MICALSINEE	DED		10 To	
20 GALLONS PF 803				eombwey!				
SUPERVISOR:	Ruben Sand	:hez		FIELD REPR	ESENTATIV	E:	Anthony Granados	S
PUMP OPERATOR;	Josh Castilla	as		UNIT NUMI	BER:	2036		
E/O:	Jesse Leos			UNIT NUM	BER.	2030		
					DLIN.			
E/O:	David Chav	arria		UNIT NUM		2001		
E/O: E/O:	David Chav			MUN TINU MUN TINU	BER:	1		-
E/O:	David Chav Jose Velasq			UNIT NUM	BER:	2001		
	ļ			UNIT NUM	BER: BER: BER:	2001		
E/O:	Jose Velaso	luez		UNIT NUM UNIT NUM FLUIDIDATA	BER: BER: BER:	2001 2006	entonite + .7% PF606 Flu	idloss + .2% PF813
E/O: E/O: 1ST SLURRY:	Jose Velasq 50/50 Poz/H - Retarder + .19	uez + 5% (BWOW) % PF65 Disper	PF44 Salt + 30 sant + .1% PF1	UNIT NUM LUNIT NUM LUDIDATA PF151 Caciu 53 Antisettling	BER: BER: BER: um Carbonate 3 Agent + .4 pp	2001 2006 + 2% PF20 B	nmer	iidloss + .2% PF813
E/O: E/O:	Jose Velasq 50/50 Poz/H - Retarder + .19	uez + 5% (BWOW)	PF44 Salt + 30	UNIT NUM LUNIT NUM LUDIDATA PF151 Caciu 53 Antisettling	BER: BER: BER:	2001 2006 + 2% PF20 B		idloss + .2% PF813
E/O: E/O: 1ST SLURRY: DENSITY; 14.5	Jose Velasq 50/50 Poz/H - Retarder + .19	uez + 5% (BWOW) % PF65 Disper	PF44 Salt + 30 sant + .1% PF1	UNIT NUM LUNIT NUM LUDIDATA PF151 Caciu 53 Antisettling	BER: BER: BER: um Carbonate 3 Agent + .4 pp	2001 2006 + 2% PF20 B	nmer	iidloss + .2% PF813
E/O: E/O: 1ST SLURRY: DENSITY: 14.5 2ND SLURRY:	Jose Velasq 50/50 Poz/H - Retarder + .19	uez + 5% (BWOW) % PF65 Disper	PF44 Salt + 30 sant + .1% PF1 MIX H2O:	UNIT NUM LUNIT NUM LUDIDATA PF151 Caciu 53 Antisettling	BER: BER: BER: um Carbonate Agent + .4 pp	2001 2006 + 2% PF20 B	nmer	idloss + .2% PF813
E/O: E/O: 1ST SLURRY: DENSITY: 14.5 2ND SLURRY: DENSITY:	Jose Velaso 50/50 Poz/H + Retarder + .19 YIELD:	uez + 5% (BWOW) % PF65 Disper	PF44 Salt + 30 sant + .1% PF1	UNIT NUM LUNIT NUM LUDIDATA PF151 Caciu 53 Antisettling	BER: BER: BER: um Carbonate 3 Agent + .4 pp	2001 2006 + 2% PF20 B	nmer	iidloss + .2% PF813
E/O: E/O: 1ST SLURRY: DENSITY: 14.5 2ND SLURRY: DENSITY: 3RD SLURRY:	Jose Velaso 50/50 Poz/H + Retarder + .19 YIELD: YIELD:	uez + 5% (BWOW) % PF65 Disper	PF44 Salt + 30 sant + .1% PF1 MIX H2O: MIX H2O:	UNIT NUM LUNIT NUM LUDIDATA PF151 Caciu 53 Antisettling	BER: BER: BER: um Carbonate 3 Agent + .4 pp SACKS:	2001 2006 + 2% PF20 B	nmer	iidloss + .2% PF813
E/O: E/O: 1ST SLURRY: DENSITY: 14.5 2ND SLURRY: DENSITY:	Jose Velaso 50/50 Poz/H + Retarder + .19 YIELD:	uez + 5% (BWOW) % PF65 Disper	PF44 Salt + 30 sant + .1% PF1 MIX H2O:	UNIT NUM LUNIT NUM LUDIDATA PF151 Caciu 53 Antisettling	BER: BER: BER: um Carbonate Agent + .4 pp	2001 2006 + 2% PF20 B	nmer	aidloss + .2% PF813
E/O: E/O: 1ST SLURRY: DENSITY: 14.5 2ND SLURRY: DENSITY: 3RD SLURRY: DENSITY: 4TH SLURRY:	Jose Velaso 50/50 Poz/H - Retarder + .19 YIELD: YIELD:	uez + 5% (BWOW) % PF65 Disper	PF44 Salt + 30 sant + .1% PF1 MIX H2O: MIX H2O: MIX H2O:	UNIT NUM LUNIT NUM LUDIDATA PF151 Caciu 53 Antisettling	BER: BER: BER: Winn Carbonate SACKS: SACKS:	2001 2006 + 2% PF20 B	nmer	sidloss + .2% PF813
E/O: E/O: 1ST SLURRY: DENSITY: 14.5 2ND SLURRY: DENSITY: 3RD SLURRY: DENSITY: 4TH SLURRY: DENSITY: DENSITY:	Jose Velaso 50/50 Poz/H + Retarder + .19 YIELD: YIELD:	uez + 5% (BWOW) % PF65 Disper	PF44 Salt + 30 sant + .1% PF1 MIX H2O: MIX H2O:	UNIT NUM LUNIT NUM LUDIDATA PF151 Caciu 53 Antisettling	BER: BER: BER: um Carbonate 3 Agent + .4 pp SACKS:	2001 2006 + 2% PF20 B	nmer	iidloss + .2% PF813
E/O: E/O: 1ST SLURRY: DENSITY: 14.5 2ND SLURRY: DENSITY: 3RD SLURRY: DENSITY: 4TH SLURRY:	Jose Velaso 50/50 Poz/H - Retarder + .19 YIELD: YIELD:	uez + 5% (BWOW) % PF65 Disper	PF44 Salt + 30 sant + .1% PF1 MIX H2O: MIX H2O: MIX H2O:	UNIT NUM LUNIT NUM LUDIDATA PF151 Caciu 53 Antisettling	BER: BER: BER: Winn Carbonate SACKS: SACKS:	2001 2006 + 2% PF20 B	nmer	iidloss + .2% PF813

WELL SUMMARY



ENERGY SERVICES LLC

COMPANY NAME:	WPX ENERGY		DATE:	8/27/201	6,		,
LEASE NAME:	CAVERN STATE 16 #		OPERATO	R NAME:	WPX ENE	RGY	
WELL NUMBER:	1H		TICKET N	UMBER:	5659		
API NUMBER:	30-015-43841		AFE NUMBER:				
SECTION: 16		TOWNSHIP):	235		RANGE:	27E
COUNTY: EDDY			STATE:	NEW MEX	KICO		
RIG NAME: ORION 10	.0	COMPANY	REP:	PRESTON	WRAY	PHONE#:	281-436-6380
NOSMICS CONTRACTOR	THE STATE OF STREET STATE OF STREET	1000	Dipection	Mrs.		2.7 6 66 7	

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

CUSTOMER HAS OWN TOP CONNECTION

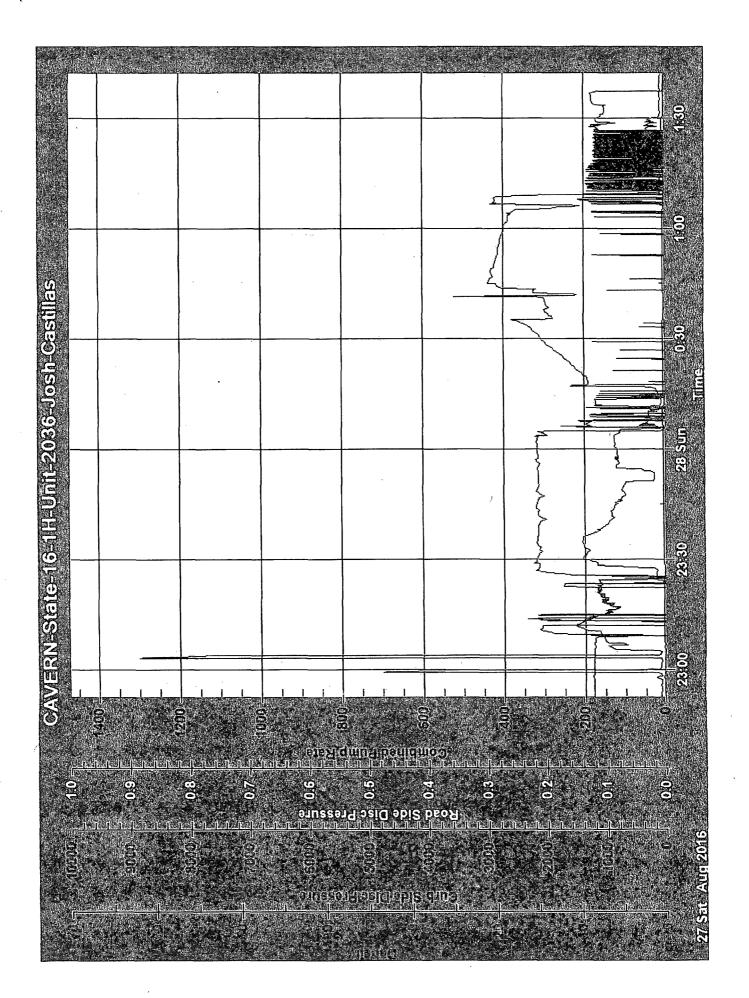
HSE

MAKE SURE ALL EMPLOYEES HAVE PROPER PPE

JOB PROCEDURE

PUMP 40 BBLS MUDPUSH @ 14.0 PPG PUMP 445 SACKS SLURRY @ 14.5 PPG

SHUT DOWN DROP PLUG (WASH UP TO PIT)
DISPLACE WELL WITH 79.1 BBLS OF 2% KCL AND 85.7 OBM





Par Five Energy Services, LLC

ART16-6455-02F

ENERGY SERVICES LLC

11279 Lovington Hwy Artesia, NM

Phone(575)748-8610 Fax: (575) 748-8625

Customer: WPX Energy

MD: 13856

Report Date:

August 26 2016

Well Name: Cavern State 16 #1H

TVD: 9055

Stage:

Lead Liner

County: Eddy

State: NM **BHST: 152**

String:

Field Blend

Rig: Orion 10

BHCT: 109

Blend Type:

Salesman: Chris DeLeon

Reported By:

Rodriguez, Sonny

Slurry Information:

Density: 14.50 ppg

Yield: 1.65 cuft/sk

Mix Fluid: 7.163 gal/sk

Slurry/Composition:

50/50PozH Cement Blend: Additive Conc PF-044 5.000 PF-151 30.00%

Design Description **BWOW** Salt

BWOB

BWOB

BWOB

Lot Number G3CB09

MFT-M20002041

PF-020 2.00%

BWOB Bentonite Gel

Bulk

PF-606 0.70% **BWOB** Fluid Loss GS20121C01-26

PF-813 0.20%

High Temp Retarder

Calcium Carbonate

2853SM

PF-065 0.10% **BWOB** Dispersant

Defoamer

04110

PF-153 0.10% PF-045 0.400 lb/sk

16.5

12:48

BWOB Anti Settling Agent

201304AC

Rheology (Average Readings) - ...6· *100 200 300. PV ≨Temp ∙

49

POD 30 Bc Temp 5:42

50 Bc. 70 Bc 100 Bc Batch Time

80 °F

152 °F

152

17.5

84.5 118

0 ml/250

1299

103.5 14.5

48 hr 72 hr

YP

152 °F 5:17

5:59 6:11 0

152 °F 40.5 68.5 135.5 173.5 210 111.75 98.25

Thickening Time does not include batch time.

Fluid Loss

Thickening Time

Free Fluid incl [Iml Collected | Start Time | Stop Time * Temp 10:22

37

12:22

micollected Minutes Temp 😅 152 °F 1000

UGA Compressive Strength 500 psi 12 hr €24 hr Temp, 50 psi

18:20

45

68 ml At 5

API (Calc) 333