

District I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720

State of New Mexico

Form C-101
Revised October 25, 2012

District II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9700

Energy Minerals and Natural Resources

District III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

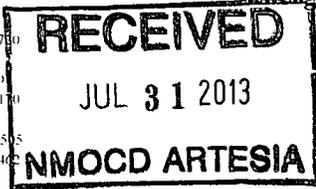
Oil Conservation Division

AMENDED REPORT

District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

1220 South St. Francis Dr.

Santa Fe, NM 87505



APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE

1. Operator Name and Address RKI Exploration & Production, LLC 210 Park Avenue, Suite 900 Oklahoma City, OK 73102		2. OGRID Number 246289
3. Property Code 39546		4. API Number 30-015-41587
5. Property Name Pinnacle State 36		6. Well No. 32H

7. Surface Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
C	36	22S	28E		150	NORTH	1700	WEST	EDDY

* Proposed Bottom Hole Location

UL - Lot	Section	Township	Range	Lot Idn	Feet from	N/S Line	Feet From	E/W Line	County
N	36	22S	28E		330	SOUTH	1715	WEST	EDDY

9. Pool Information

Culebra Bluff; Bone Spring, South (15011)	15011
---	-------

Additional Well Information

11. Work Type N	12. Well Type O	13. Cable/Rotary R	14. Lease Type S	15. Ground Level Elevation 3,143 feet
16. Multiple No	17. Proposed Depth 12,967 feet	18. Formation Bone Spring	19. Contractor	20. Spud Date ASAP
Depth to Ground water		Distance from nearest fresh water well		Distance to nearest surface water

21. Proposed Casing and Cement Program

Type	Hole Size	Casing Size	Casing Weight/ft	Setting Depth	Sacks of Cement	Estimated TOC
SURFACE	17 1/2 in.	13 3/8 in.	54.5#/I-55	950 feet	804 SKS	SURFACE
INTERMEDIATE	12-1/4 in.	9 5/8 in.	40#/I-55	4,000 feet	1008 SKS	SURFACE
PRODUCTION	8 3/4 in.	5 1/2 in.	17#/HCP-110	12,967 feet	1,596 SKS	3,700 feet

Casing/Cement Program: Additional Comments

REFER TO ATTACHED DRILLING PLAN FOR DETAILED DATA. PLEASE ALSO BE ADVISED THAT A CLOSED LOOP SYSTEM WILL BE USED FOR THE SUBJECT WELL.

22. Proposed Blowout Prevention Program

Type	Working Pressure	Test Pressure	Manufacturer
REFER TO ATTACHED DRILLING PLAN FOR DETAIL	3,000 PSI	3,000 PSI	

<p>23. I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that I have complied with 19.15.14.9 (A) NMAC <input checked="" type="checkbox"/> and/or 19.15.14.9 (B) NMAC <input checked="" type="checkbox"/>, if applicable.</p> <p>Signature: <i>Charles K. Ahn</i></p> <p>Printed name: Charles K. Ahn</p> <p>Title: EH&S/Regulatory Manager</p> <p>E-mail Address: cahn@rkixp.com</p> <p>Date: 7/31/2013</p>	OIL CONSERVATION DIVISION	
	Approved By: <i>T.C. Shepard</i>	
	Title: <i>Bookkeeper</i>	
	Approved Date: <i>8/1/2013</i>	Expiration Date: <i>8/1/2015</i>
	Conditions of Approval Attached	
	Phone: 405-996-5771	

gnd

DISTRICT I
1625 N. Peach Dr., El Paso, NM 88241
Phone: (575) 334-6161 Fax: (575) 333-0720

DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-0720

DISTRICT III
1000 Rio Hondo Rd., Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170

DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

State of New Mexico
Energy, Minerals & Natural Resources Department
OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Form C-102
Revised August 1, 2011
Submit one copy to appropriate
District Office
 AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number 30-015-41587	Pool Code 15011	Pool Name Culebra Bluff, Bone Spring, South (15011)
Property Code 39546	Property Name PINNACLE STATE 36	Well Number 32H
OGRID No. 246289	Operator Name RKI EXPLORATION & PRODUCTION	Elevation 3142.5'

Surface Location

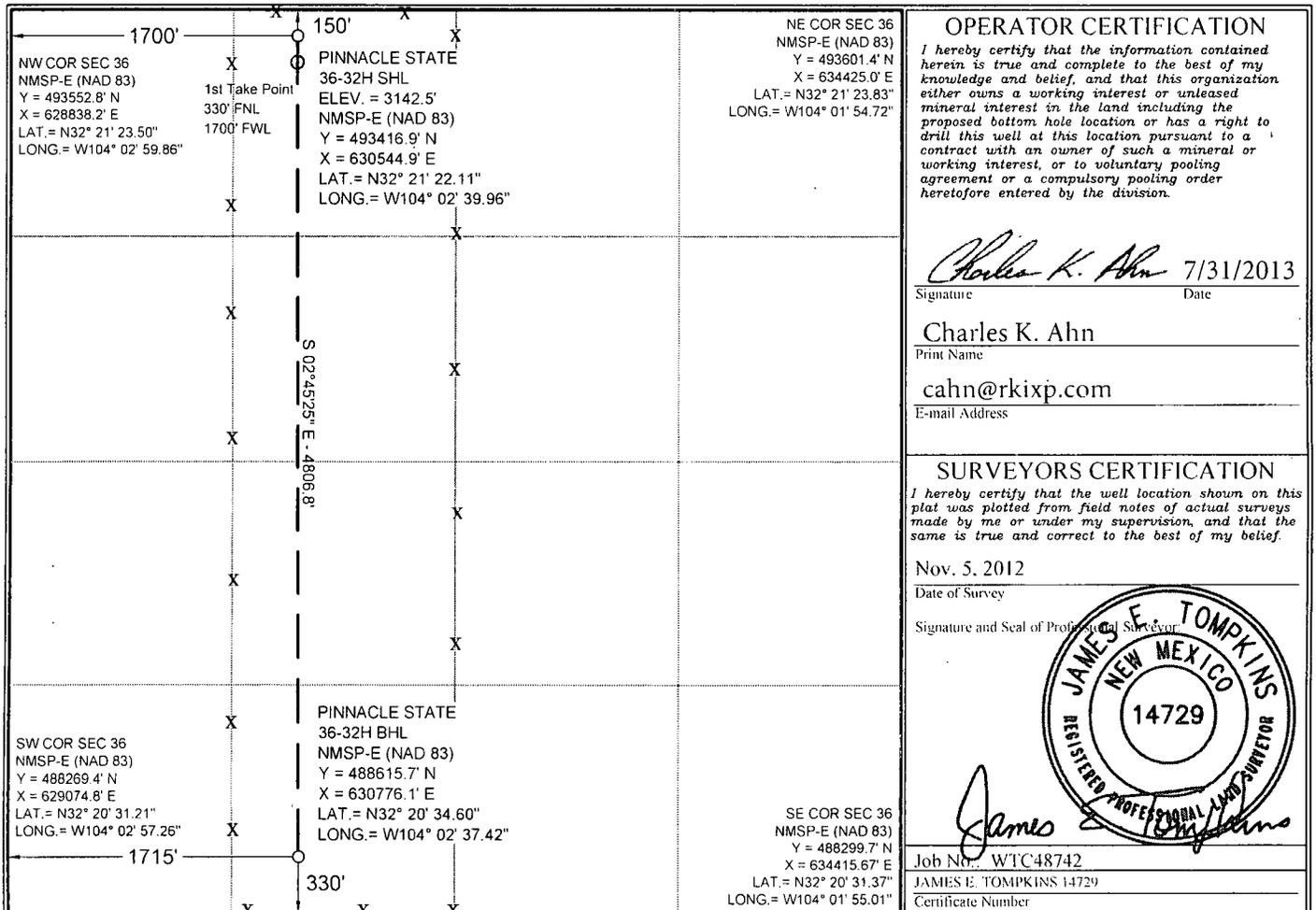
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
C	36	22 S	28 E		150	NORTH	1700	WEST	EDDY

Bottom Hole Location If Different From Surface

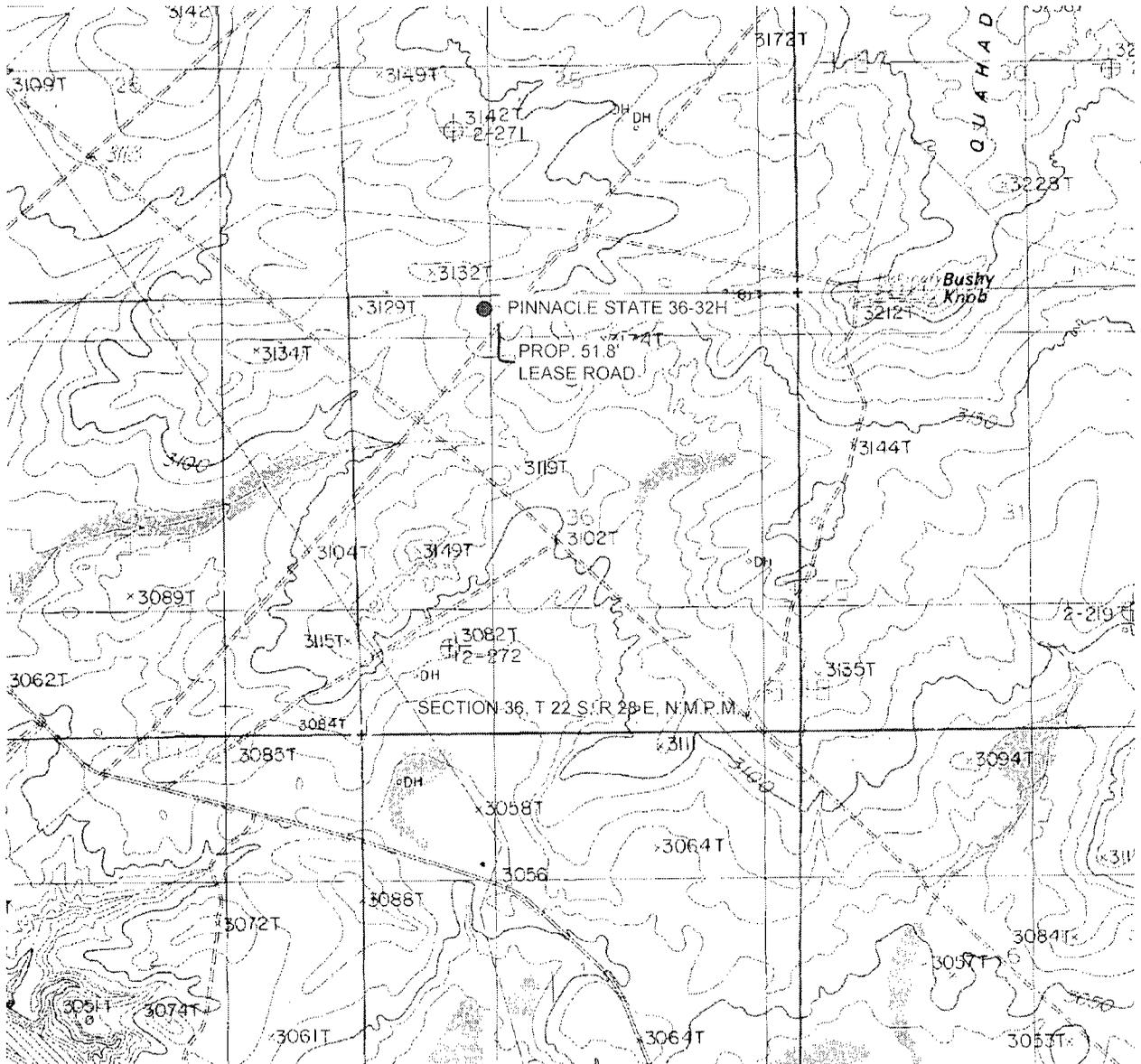
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
N	36	22 S	28 E		330	SOUTH	1715	WEST	EDDY

Dedicated Acres 160	Joint or Infill	Consolidated Code	Order No.
-------------------------------	-----------------	-------------------	-----------

No allowable will be assigned to this completion until all interests have been consolidated or a non-standard unit has been approved by the division.



LOCATION VERIFICATION MAP



SCALE: 1" = 2000'

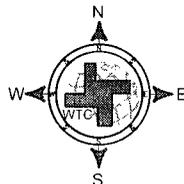
SECTION 36, T 22 S, R 28 E, N.M.P.M.

COUNTY: EDDY STATE: NM

DESCRIPTION: 150' FNL & 1700' FWL

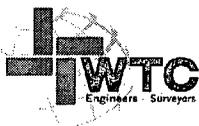
OPERATOR: RKI EXPLORATION & PRODUCTION

WELL NAME: PINNACLE STATE 36-32H



DRIVING DIRECTIONS:

From the intersection of New Mexico State Highway 31 & County Road 605 (US Refinery Road). Go North on County Road 605 for 2.3 miles to lease road right. Go right for 1.3 miles and the location is on the left.

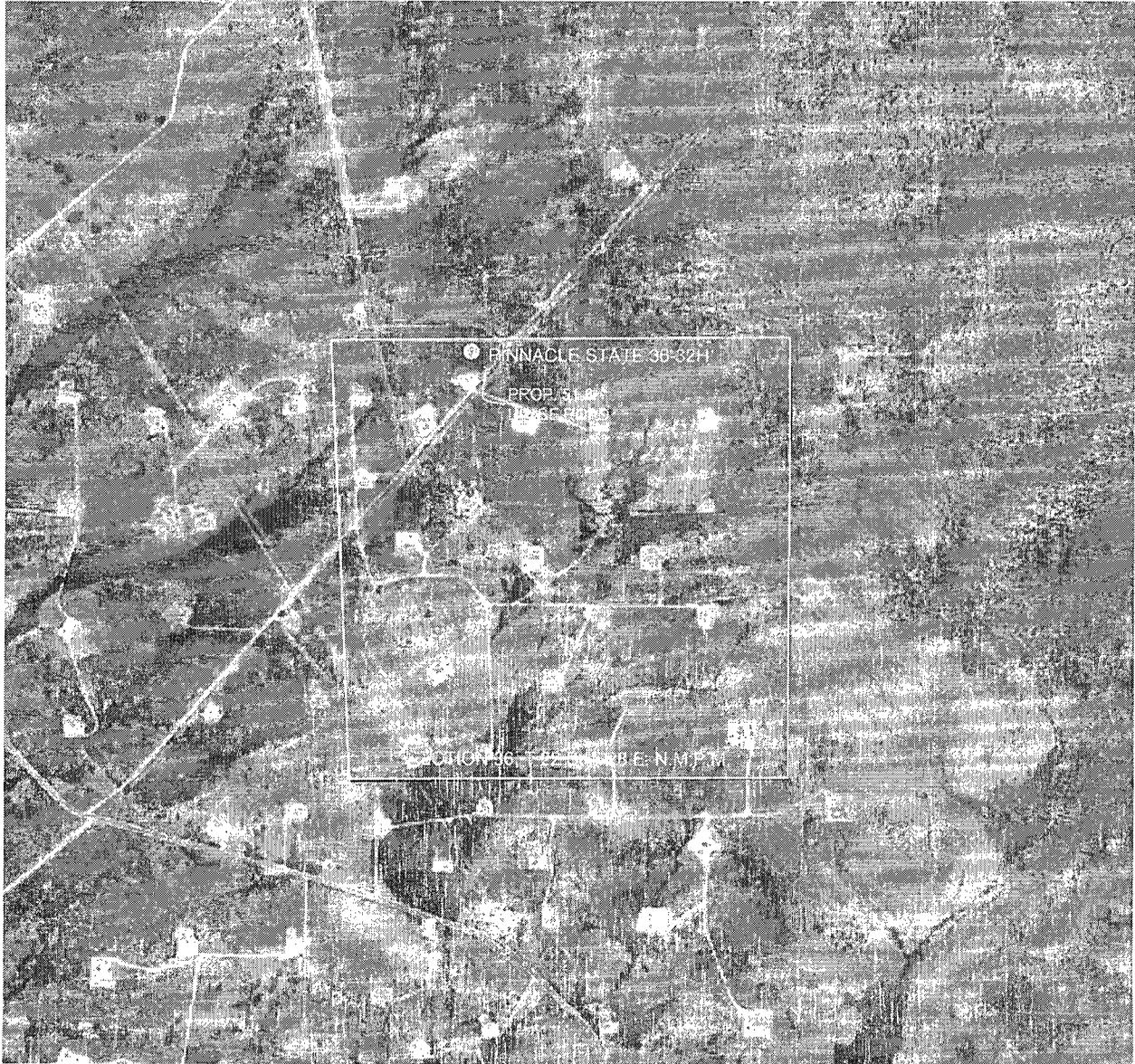


WEST TEXAS CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
405 S.W. 1st STREET
ANDREWS, TEXAS 79714
(432) 523-2181

RKI EXPLORATION & PRODUCTION

JOB No.: WTC48742

AERIAL MAP



SCALE: 1" = 2000'

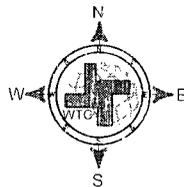
SECTION 36, T 22 S, R 28 E, N.M.P.M.

COUNTY: EDDY STATE: NM

DESCRIPTION: 150' FNL & 1700' FWL

OPERATOR: RKI EXPLORATION & PRODUCTION

WELL NAME: PINNACLE STATE 36-32H



DRIVING DIRECTIONS:

From the intersection of New Mexico State Highway 31 & County Road 605 (US Refinery Road). Go North on County Road 605 for 2.3 miles to lease road right. Go right for 1.3 miles and the location is on the left.

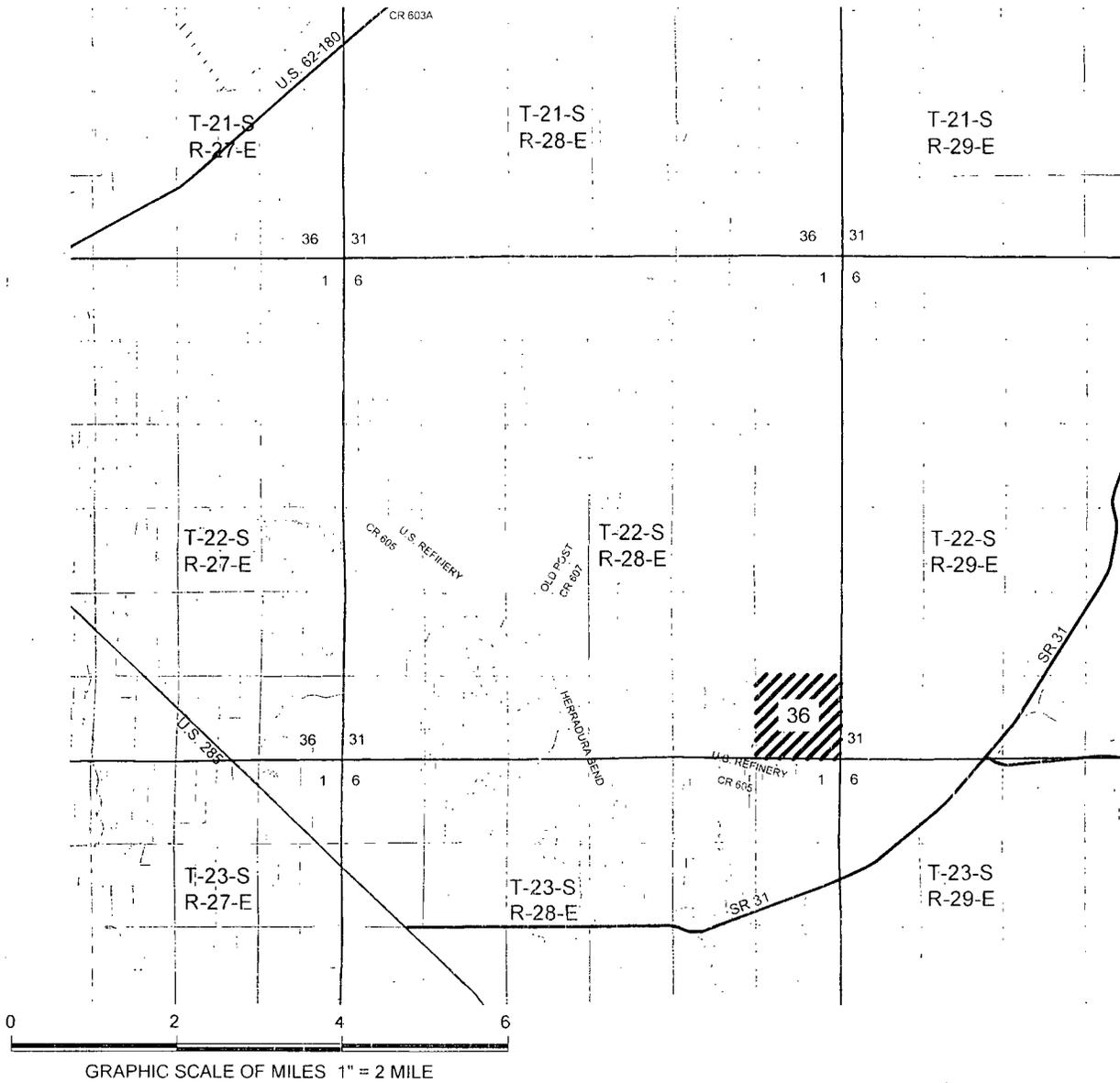


WEST TEXAS CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
405 S.W. 1st STREET
ANDREWS, TEXAS 79714
(432) 523-2181

RKI EXPLORATION & PRODUCTION

JOB No.: WTC48742

VICINITY MAP



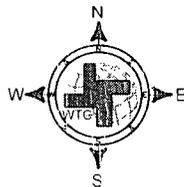
SECTION 36, T 22 S, R 28 E, N.M.P.M.

COUNTY: EDDY STATE: NM

DESCRIPTION: 150' FNL & 1700' FWL

OPERATOR: RKI EXPLORATION & PRODUCTION

WELL NAME: PINNACLE STATE 36-32H



DRIVING DIRECTIONS:

From the intersection of New Mexico State Highway 31 & County Road 605 (US Refinery Road). Go North on County Road 605 for 2.3 miles to lease road right. Go right for 1.3 miles and the location is on the left.

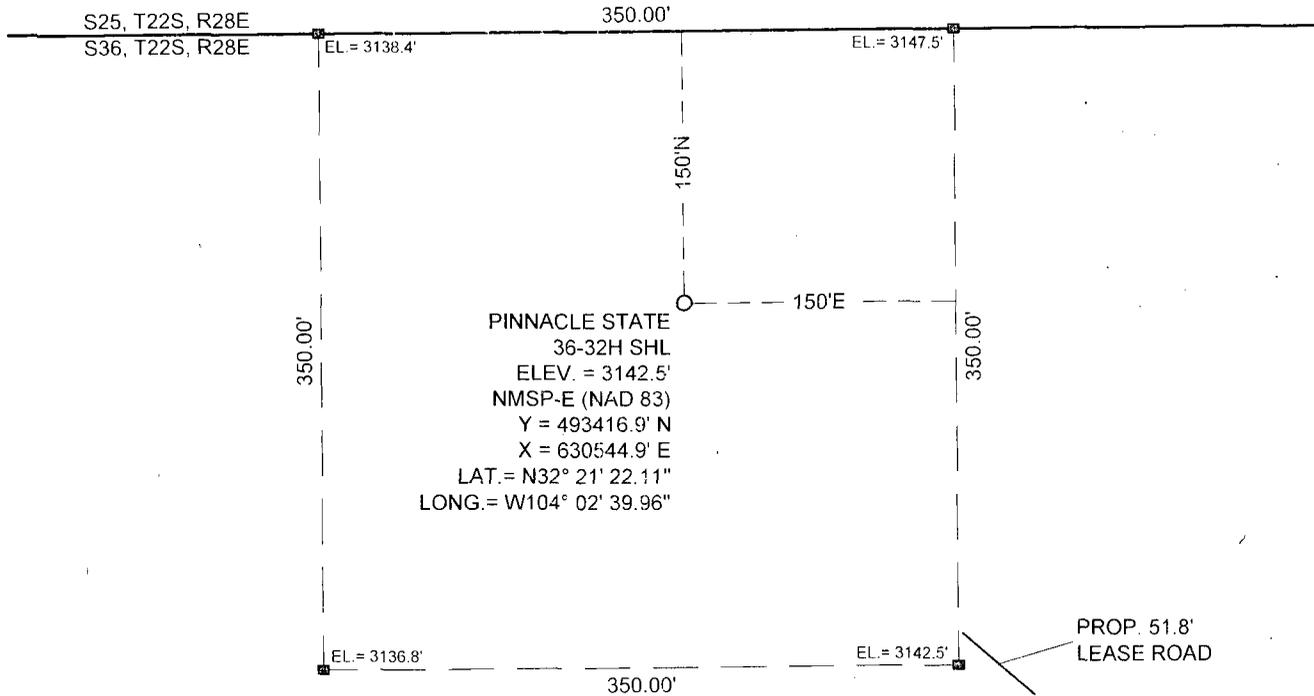


WEST TEXAS CONSULTANTS, INC.
 ENGINEERS PLANNERS SURVEYORS
 405 S.W. 1st. STREET
 ANDREWS, TEXAS 79714
 (432) 523-2181

RKI EXPLORATION & PRODUCTION

JOB No.: WTC48742

SITE LOCATION



SCALE: 1" = 100'

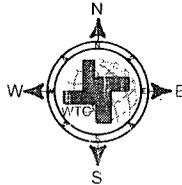
SECTION 36, T 22 S, R 28 E, N.M.P.M.

COUNTY: EDDY STATE: NM

DESCRIPTION: 150' FNL & 1700' FWL

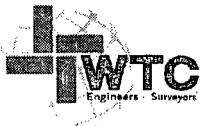
OPERATOR: RKI EXPLORATION & PRODUCTION

WELL NAME: PINNACLE STATE 36-32H



DRIVING DIRECTIONS:

From the intersection of New Mexico State Highway 31 & County Road 605 (US Refinery Road). Go North on County Road 605 for 2.3 miles to lease road right. Go right for 1.3 miles and the location is on the left.



WEST TEXAS CONSULTANTS, INC.
ENGINEERS PLANNERS SURVEYORS
405 S.W. 1st STREET
ANDREWS, TEXAS 79714
(432) 523-2181

RKI EXPLORATION & PRODUCTION

JOB No.: WTC48742

RKI Exploration & Production, LLC

Well Pinnacle State 36-32H
 Location Surface: 150 FNL 1,700 FWL Sec. 36-22S-28E
 Bottom Hole: 330 FSL 1,715 FWL Sec. 36-22S-28E
 County Eddy
 State New Mexico

- 1) The elevation of the unprepared ground is 3,143 feet above sea level.
- 2) The geologic name of the surface formation is Quaternary - Alluvium.
- 3) A rotary rig will be utilized to drill the well to 12,967 feet and run casing & cement. This equipment will then be rigged down and the well will be completed with a workover rig.
- 4) Proposed depth is 12,967 feet

5) Estimated tops:

	MD	TVD		
Lamar Lime	2,774	2,774		
Base of Lime	2,814	2,814		
Delaware Top	2,900	2,900		
Bell Canyon Sand	2,900	2,900		
Cherry Canyon Sand	3,681	3,681		
Brushy Canyon Sand	5,905	5,905		
Bone Spring Lime	6,071	6,071	Oil	BHP = .44 psi/ft x depth 2,671 psi
Avalon Sand	6,175	6,175	Oil	2,717 psi
Bone Spring 1st Sand	7,332	7,332	Oil	3,226 psi
KOP	7,833	7,833	Oil	3,447 psi
Bone Spring 2nd Sand	8,097	8,088	Oil	3,563 psi
Landing Point	8,740	8,406	Oil	3,699 psi
TD	12,967	8,356	Oil	3,677 psi

6) Casing program:

Hole Size	Top	Bottom	OD Csg	Wt/Grade	Connection	Collapse Design Factor	Burst Design Factor	Tension Design Factor
17 1/2"	0	950	13 3/8"	54.5#/J-55	ST&C	2.70	13.06	9.93
12 1/4"	0	4,000	9 5/8"	40#/J-55	LT&C	1.15	4.49	3.25
8 3/4"	0	12,967	5 1/2"	17#/HCP-110	LT&C	2.23	1.55	5.48
Collapse	1.125							
Burst	1.0							
Tension	2.0							

7) Cement program:

Surface 17 1/2" hole
 Pipe OD 13 3/8"
 Setting Depth 950 ft
 Annular Volume 0.69462 cf/ft
 Excess 1 100 %

Lead 604 sx 1.74 cf/sk 13.5 ppg
 Tail 200 sx 1.34 cf/sk 14.8 ppg

Lead: "C" + 4% PF20 + 2% PF1 + .125 pps PF29 + .25 ps PF46
 Tail: "C" + 1% PF1

Top of cement: Surface

Intermediate 12 1/4" hole
 Pipe OD 9 5/8"
 Setting Depth 4,000 ft
 Annular Volume 0.31318 cf/ft 0.3627 cf/ft
 Excess 0.5 50 %

Lead 808 sx 1.92 cf/sk 12.9 ppg

Tail

200 sx

1.33 cf/sk

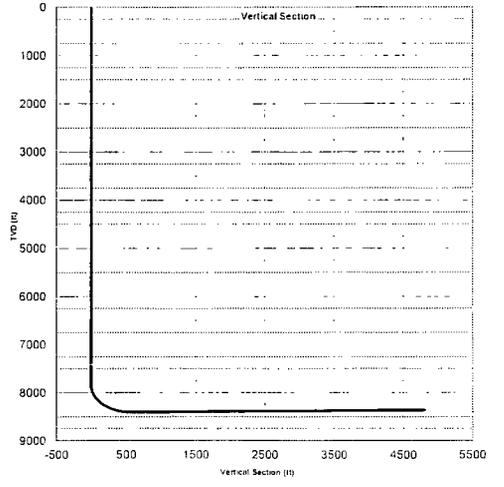
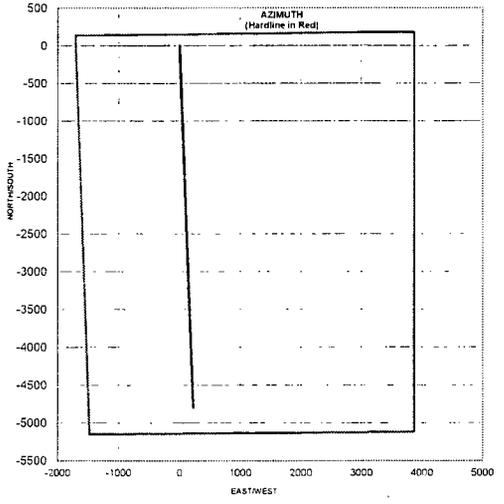
14.8 ppg

Lead: 35/65 Poz/C + 5% PF44 + 6% PF20 + 3 pps PF42 + .125 pps PF29 + 0.4 pps PF46 + 1% PF1

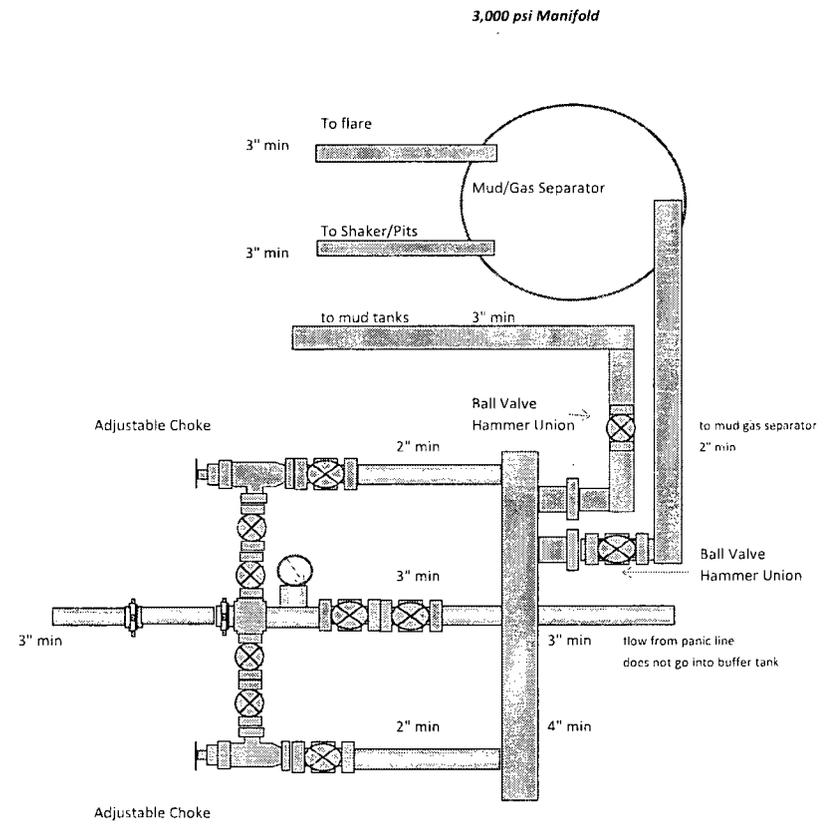
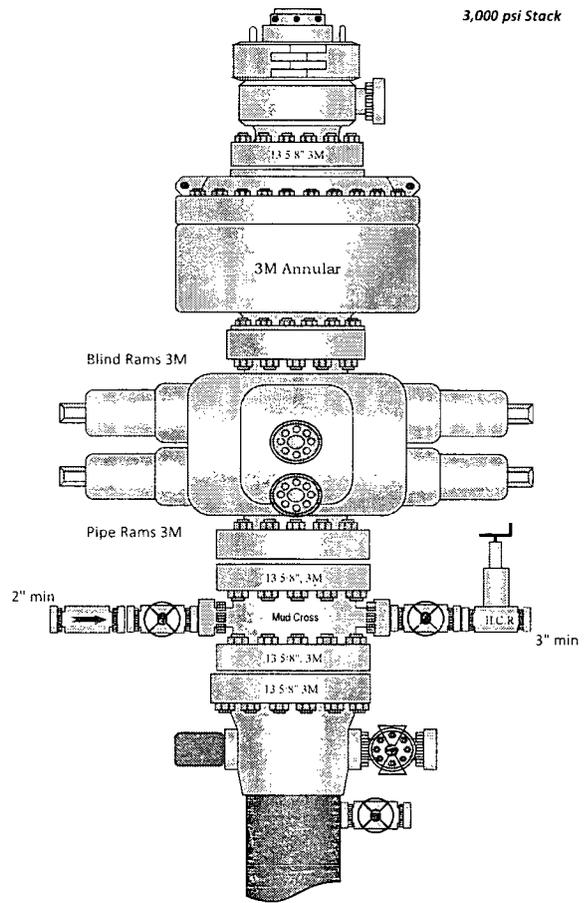
Tail: "C" + .2% PF13

Top of cement: Surface

RKI EXPLORATION								RIG:	
WELL:		Pinnacle State 36-32H (Eddy County, NM)			Target Direction:		177.24 deg		
LOCATION:		150' FNL & 1700' FWL 36-22S-28E			North/South Hard Line:		330		
BHL:		330' FSL & 1715' FWL 36-22S-28E			East/West Hard Line:		1.715		
STATION NUMBER	SURVEY DEPTH	INC	AZMTH	TVD	N-S	E-W	VERT. SECTION	DLS/100	
Tie-In									
1									
2	1000.0			1000					
3	2000.0			2000					
4	3000.0			3000					
5	4000.0			4000					
6	5000.0			5000					
7	6000.0			6000					
8	7000.0			7000					
KOP	7833.0			7833					
10	7933.0	10.00	177.24	7932	-9	0	9	10.0	
11	8033.0	20.00	177.24	8029	-35	2	35	10.0	
12	8097.0	26.40	177.24	8088	-60	3	60	10.0	
13	8133.0	30.00	177.24	8119	-77	4	77	10.0	
14	8233.0	40.00	177.24	8201	-134	6	134	10.0	
15	8333.0	50.00	177.24	8272	-204	10	205	10.0	
16	8433.0	60.00	177.24	8329	-286	14	286	10.0	
17	8533.0	70.00	177.24	8371	-377	18	377	10.0	
18	8633.0	80.00	177.24	8397	-473	23	473	10.0	
EOC	8740.0	90.68	177.24	8406	-579	28	580	10.0	
20	8833.0	90.68	177.24	8405	-672	32	673		
21	8933.0	90.68	177.24	8404	-772	37	773		
22	8745.0	90.68	177.24	8406	-584	28	585		
23	8845.0	90.68	177.24	8405	-684	33	685		
24	8945.0	90.68	177.24	8404	-784	38	785		
25	9000.0	90.68	177.24	8403	-839	40	840		
26	9250.0	90.68	177.24	8400	-1089	52	1090		
27	9500.0	90.68	177.24	8397	-1338	65	1340		
28	9750.0	90.68	177.24	8394	-1588	77	1590		
29	10000.0	90.68	177.24	8391	-1838	89	1840		
30	10250.0	90.68	177.24	8388	-2087	101	2090		
31	10500.0	90.68	177.24	8385	-2337	113	2340		
32	10750.0	90.68	177.24	8382	-2587	125	2590		
33	11000.0	90.68	177.24	8379	-2837	137	2840		
34	11250.0	90.68	177.24	8376	-3086	149	3090		
35	11500.0	90.68	177.24	8373	-3336	161	3340		
36	11750.0	90.68	177.24	8370	-3586	173	3590		
37	12000.0	90.68	177.24	8367	-3835	185	3840		
38	12250.0	90.68	177.24	8365	-4085	197	4090		
39	12500.0	90.68	177.24	8362	-4335	209	4340		
40	12750.0	90.68	177.24	8359	-4584	221	4590		
TD	12967.0	90.68	177.24	8356	-4801	231	4897		



Directional Survey



Permit Conditions of Approval

API: 30-015-41587

OCD Reviewer	Condition
CSHAPARD	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.