Form 3160-3
(March 2012)

MAY 15 2017
RECEIVED

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

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER

5. Lease Serial No.
NMNM90161

6. If Indian, Allotee or Tribe Name

1a. Type of work: ☑ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No.
W BLINEBRY DRINKARD / NMNM12004

1b. Type of Well: ☐ Oil Well ☐ Gas Well ☑ Other INJ-ER ☑ Single Zone ☐ Multiple Zone

8. Lease Name and Well No. (37346)
WEST BLINEBRY DRINKARD UN 184

2. Name of Operator
APACHE CORPORATION (873)

9. API Well No.
30-025-43804

3a. Address
303 Veterans Airpark Lane #1000 Midland TX

3b. Phone No. *(include area code)*
(432)818-1000

10. Field and Pool, or Exploratory (22900)
DRINKARD / EUNICE; BLI-TU-DR, N

4. Location of Well *(Report location clearly and in accordance with any State requirements.*)*
At surface NESW / 1820 FSL / 2300 FWL / LAT 32.4911929 / LONG -103.1862373
At proposed prod. zone NESW / 1820 FSL / 2300 FWL / LAT 32.4911929 / LONG -103.1862373

11. Sec., T. R. M. or Blk. and Survey or Area
SEC 8 / T21S / R37E / NMP

14. Distance in miles and direction from nearest town or post office*
4.5 miles

12. County or Parish
LEA

13. State
NM

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)
1820 feet

16. No. of acres in lease
640

17. Spacing Unit dedicated to this well
40

F/P

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.
470 feet

19. Proposed Depth
6960 feet / 6960 feet

20. BLM/BIA Bond No. on file
FED: NMB000736

21. Elevations (Show whether DF, KDB, RT, GL, etc.)
3519 feet

22. Approximate date work will start*
05/15/2017

23. Estimated duration
10 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification
6. Such other site specific information and/or plans as may be required by the BLM.

25. Signature	Name *(Printed/Typed)*	Date
(Electronic Submission)	Sorina Flores / Ph: (432)818-1167	02/23/2017

Title
Supv of Drilling Services

Approved by *(Signature)*	Name *(Printed/Typed)*	Date
(Electronic Submission)	Cody Layton / Ph: (575)234-5959	05/12/2017

Title	Office
Supervisor Multiple Resources	CARLSBAD

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.
Conditions of approval, if any, are attached.

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.

(Continued on page 2)

*(Instructions on page 2)

APPROVED WITH CONDITIONS
05/15/17

INSTRUCTIONS

GENERAL: This form is designed for submitting proposals to perform certain well operations, as indicated on Federal and Indian lands and leases for action by appropriate Federal agencies, pursuant to applicable Federal laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from local Federal offices.

ITEM 1: If the proposal is to redrill to the same reservoir at a different subsurface location or to a new reservoir, use this form with appropriate notations. Consult applicable Federal regulations concerning subsequent work proposals or reports on the well.

ITEM 4: Locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local Federal offices for specific instructions.

ITEM 14: Needed only when location of well cannot readily be found by road from the land or lease description. A plat, or plats, separate or on the reverse side, showing the roads to, and the surveyed location of, the well, and any other required information, should be furnished when required by Federal agency offices.

ITEMS 15 AND 18: If well is to be, or has been directionally drilled, give distances for subsurface location of hole in any present or objective productive zone.

ITEM 22: Consult applicable Federal regulations, or appropriate officials, concerning approval of the proposal before operations are started.

NOTICES

The Privacy Act of 1974 and regulation in 43 CFR 2.48(d) provide that you be furnished the following information in connection with information required by this application.
AUTHORITY: 30 U.S.C. 181 et seq., 25 U.S.C. 396; 43 CFR 3160
PRINCIPAL PURPOSES: The information will be used to: (1) process and evaluate your application for a permit to drill a new oil, gas, or service well or to reenter a plugged and abandoned well; and (2) document, for administrative use, information for the management, disposal and use of National Resource Lands and resources including (a) analyzing your proposal to discover and extract the Federal or Indian resources encountered; (b) reviewing procedures and equipment and the projected impact on the land involved; and (c) evaluating the effects of the proposed operation on the surface and subsurface water and other environmental impacts.
ROUTINE USE: Information from the record and/or the record will be transferred to appropriate Federal, State, and local or foreign agencies, when relevant to civil, criminal or regulatory investigations or prosecution, in connection with congressional inquiries and for regulatory responsibilities.
EFFECT OF NOT PROVIDING INFORMATION: Filing of this application and disclosure of the information is mandatory only if you elect to initiate a drilling or reentry operation on an oil and gas lease.

The Paperwork Reduction Act of 1995 requires us to inform you that:
The BLM collects this information to allow evaluation of the technical, safety, and environmental factors involved with drilling for oil and/or gas on Federal and Indian oil and gas leases. This information will be used to analyze and approve applications. Response to this request is mandatory only if the operator elects to initiate drilling or reentry operations on an oil and gas lease. The BLM would like you to know that you do not have to respond to this or any other Federal agency-sponsored information collection unless it displays a currently valid OMB control number.

BURDEN HOURS STATEMENT: Public reporting burden for this form is estimated to average 8 hours per response, including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding the burden estimate or any other aspect of this form to U.S. Department of the Interior, Bureau of Land Management (1004-0137), Bureau Information Collection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

(Continued on page 3)

Additional Operator Remarks

Location of Well

1. SHL: NESW / 1820 FSL / 2300 FWL / TWSP: 21S / RANGE: 37E / SECTION: 8 / LAT: 32.4911929 / LONG: -103.1862373 (TVD: 0 feet, MD: 0 feet)
   BHL: NESW / 1820 FSL / 2300 FWL / TWSP: 21S / RANGE: 37E / SECTION: 8 / LAT: 32.4911929 / LONG: -103.1862373 (TVD: 6960 feet, MD: 6960 feet)

BLM Point of Contact

Name: Alana Baker

Title: Legal Instruments Examiner

Phone: 5752345922

Email: abaker@blm.gov

Review and Appeal Rights

A person contesting a decision shall request a State Director review. This request must be filed within 20 working days of receipt of the Notice with the appropriate State Director (see 43 CFR 3165.3). The State Director review decision may be appealed to the Interior Board of Land Appeals, 801 North Quincy Street, Suite 300, Arlington, VA 22203 (see 43 CFR 3165.4). Contact the above listed Bureau of Land Management office for further information.

ID: Formation 3 **Name:** YATES

Lithology(ies):

Elevation: 744 **True Vertical Depth:** 2675 **Measured Depth:** 2675

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 4 **Name:** SEVEN RIVERS

Lithology(ies):

Elevation: 500 **True Vertical Depth:** 2919 **Measured Depth:** 2919

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 5 **Name:** QUEEN

Lithology(ies):

Elevation: -35 **True Vertical Depth:** 3454 **Measured Depth:** 3454

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 6 **Name:** GRAYBURG

Lithology(ies):

Elevation: -314 **True Vertical Depth:** 3733 **Measured Depth:** 3733

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 7 **Name:** SAN ANDRES

Lithology(ies):

Elevation: -536 **True Vertical Depth:** 3955 **Measured Depth:** 3955

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 8 **Name:** GLORIETA

Lithology(ies):

Elevation: -1786 **True Vertical Depth:** 5205 **Measured Depth:** 5205

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 9 **Name:** PADDOCK

Lithology(ies):

Elevation: -1861 **True Vertical Depth:** 5280 **Measured Depth:** 5280

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

ID: Formation 10 **Name:** BLINEBRY

Lithology(ies):

Elevation: -2306 **True Vertical Depth:** 5725 **Measured Depth:** 5725

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 11 **Name:** TUBB

Lithology(ies):

Elevation: -2786 **True Vertical Depth:** 6205 **Measured Depth:** 6205

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

ID: Formation 12 **Name:** DRINKARD

Lithology(ies):

Elevation: -3126 **True Vertical Depth:** 6545 **Measured Depth:** 6545

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? Y

ID: Formation 13 **Name:** ABO

Lithology(ies):

Elevation: -3398 **True Vertical Depth:** 6817 **Measured Depth:** 6817

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Mineral Resource(s):

NATURAL GAS

OIL

Is this a producing formation? N

Section 2 - Blowout Prevention

Pressure Rating (PSI): 3M **Rating Depth:** 7000

Equipment: Rotating Head, Mud Gas Separator, Blow Down Pit, Flare Line, Ignitor

Requesting Variance? YES

Variance request: Apache requests a variance to use a flex line between the BOP and choke manifold. Manufacturer: Midwest Hose & Specialty, Inc. WP rating: 5000 psi See attachments for details
Testing Procedure: BOP/BOPE will be tested by independent service company to 250psi low and high pressure indicated above per Onshore Order 2 requirements. System may be upgraded to higher pressure but sill tested to WP listed . If system is upgraded, all components installed will be functional and tested. Pipe rams will be operationally checked each 24 hr period. Blind rams will be operationally checked on each TOOH. These checks will be noted on daily tour sheets. Other accessories to BOP equipment will include Kelly cock and floor safety valve (inside BOP), choke lines and choke manifold. (see attached schematic)

Choke Diagram Attachment:

WBDU184_BOP_Choke_Schematic_02-21-2017.pdf

WBDU184_FlexHoseVariance_05-01-2017.pdf

BOP Diagram Attachment:

WBDU184_BOP_Choke_Schematic_02-21-2017.pdf

Section 3 - Casing

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

String Type: SURFACE **Other String Type:**

Hole Size: 11

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -3441

Bottom setting depth MD: 1300 **Bottom setting depth TVD:** 1300

Bottom setting depth MSL: -4741

Calculated casing length MD: 1300

Casing Size: 8.625 **Other Size**

Grade: J-55 **Other Grade:**

Weight: 24

Joint Type: STC **Other Joint Type:**

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 2.43 **Burst Design Safety Factor:** 1.93

Joint Tensile Design Safety Factor type: BUOYANT **Joint Tensile Design Safety Factor:** 1.8

Body Tensile Design Safety Factor type: BUOYANT **Body Tensile Design Safety Factor:** 1.8

Casing Design Assumptions and Worksheet(s):

WBDU184_SurfCsgAssumpt_02-21-2017.pdf

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

String Type: PRODUCTION **Other String Type:**

Hole Size: 7.875

Top setting depth MD: 0 **Top setting depth TVD:** 0

Top setting depth MSL: -3441

Bottom setting depth MD: 6960 **Bottom setting depth TVD:** 6960

Bottom setting depth MSL: -10401

Calculated casing length MD: 6960

Casing Size: 5.5 **Other Size**

Grade: L-80 **Other Grade:**

Weight: 17

Joint Type: LTC **Other Joint Type:**

Condition: NEW

Inspection Document:

Standard: API

Spec Document:

Tapered String?: N

Tapered String Spec:

Safety Factors

Collapse Design Safety Factor: 1.71 **Burst Design Safety Factor:** 2.2

Joint Tensile Design Safety Factor type: BUOYANT **Joint Tensile Design Safety Factor:** 1.8

Body Tensile Design Safety Factor type: BUOYANT **Body Tensile Design Safety Factor:** 1.8

Casing Design Assumptions and Worksheet(s):

WBDU184_ProdCsgAssumpt_02-21-2017.pdf

Section 4 - Cement

Casing String Type: SURFACE

Stage Tool Depth:

Lead

Top MD of Segment: 0	**Bottom MD Segment:** 800	**Cement Type:** Cl C
Additives: 4% Bentonite + 1% CaCl2	**Quantity (sks):** 153	**Yield (cu.ff./sk):** 1.73
Density: 13.5	**Volume (cu.ft.):** 265	**Percent Excess:** 30

Tail

Top MD of Segment: 800	**Bottom MD Segment:** 1300	**Cement Type:** Cl C
Additives: 1% CaCl2	**Quantity (sks):** 124	**Yield (cu.ff./sk):** 1.33
Density: 14.8	**Volume (cu.ft.):** 165	**Percent Excess:** 30

Casing String Type: PRODUCTION

Stage Tool Depth:

Lead

Top MD of Segment: 0	**Bottom MD Segment:** 5700	**Cement Type:** Cl C
Additives: 3% CaCL2	**Quantity (sks):** 600	**Yield (cu.ff./sk):** 1.9
Density: 12.6	**Volume (cu.ft.):** 1140	**Percent Excess:** 20

Tail

Top MD of Segment: 5700	**Bottom MD Segment:** 6960	**Cement Type:** Cl C
Additives: 0.2% fluid loss additive + mod temp 0.2% retarder -low temp	**Quantity (sks):** 220	**Yield (cu.ff./sk):** 1.33
Density: 14.8	**Volume (cu.ft.):** 292	**Percent Excess:** 33

Section 5 - Circulating Medium

Mud System Type: Closed

Will an air or gas system be Used? NO

Description of the equipment for the circulating system in accordance with Onshore Order #2:

Diagram of the equipment for the circulating system in accordance with Onshore Order #2:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times

Describe the mud monitoring system utilized: PVT/Pason/Visual Monitoring

Circulating Medium Table

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Top Depth: 0 **Bottom Depth:** 1300

Mud Type: SPUD MUD

Min Weight (lbs./gal.): 8.3 **Max Weight (lbs./gal.):** 9

Density (lbs/cu.ft.): **Gel Strength (lbs/100 sq.ft.):**

PH: **Viscosity (CP):**

Filtration (cc): **Salinity (ppm):**

Additional Characteristics:

Top Depth: 1300 **Bottom Depth:** 6960

Mud Type: SALT SATURATED

Min Weight (lbs./gal.): 9.8 **Max Weight (lbs./gal.):** 10.5

Density (lbs/cu.ft.): **Gel Strength (lbs/100 sq.ft.):**

PH: **Viscosity (CP):**

Filtration (cc): **Salinity (ppm):**

Additional Characteristics:

Section 6 - Test, Logging, Coring

List of production tests including testing procedures, equipment and safety measures:

Drill stem test will be based on geological sample shows. Onshore Order 2.111.D shall be followed.

List of open and cased hole logs run in the well:

CALIPER,CNL,DLL,FDC,GR,SONIC

Coring operation description for the well:

None planned

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 3076 **Anticipated Surface Pressure:** 1544.8

Anticipated Bottom Hole Temperature(F): 110

Anticipated abnormal proessures, temperatures, or potential geologic hazards? YES

Describe:

There may be water flows or losses encountered from 3900' to 6500' due to offset waterflood and san andres source water wells.

Contingency Plans geoharzards description:

Depending on severity of flow, a DVT may be used and a 2 stage cement job will be performed. H2S may be encountered, but there will be H2S equipment on location along with a detection system. See attached H2S drilling ops plan.

Contingency Plans geohazards attachment:

WBDU184_2StageCmtContingency_02-21-2017.pdf

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

WBDU184_H2SOpsContPlan_02-21-2017.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

Other proposed operations facets description:

**Cement contingency plan attached if loss circulation is encountered.
Apache request variance to use a flex line between BOP and Choke Manifold. See attachment for details.

Other proposed operations facets attachment:

WBDU184_2StageCmtContingency_02-21-2017.pdf

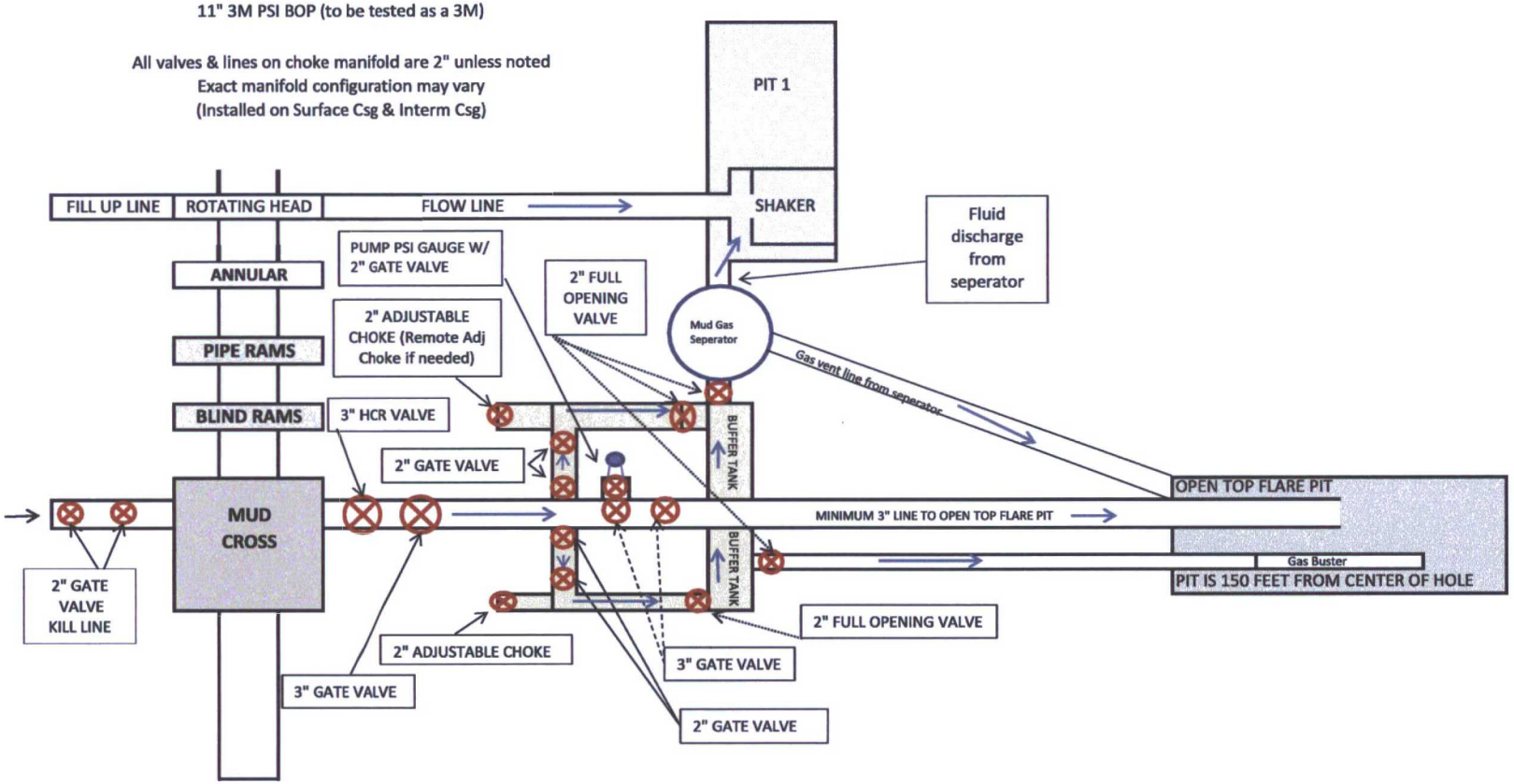
Other Variance attachment:

WBDU184_FlexHoseVariance_02-21-2017.pdf

APACHE BOP AND CHOKE MANIFOLD SCHEMATIC

11" 3M PSI BOP (to be tested as a 3M)

All valves & lines on choke manifold are 2" unless noted
Exact manifold configuration may vary
(Installed on Surface Csg & Interm Csg)



*** If H2S is encountered in quantities greater than 100ppm, Apache will shut in well & install a remote operated choke ***

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

January 30, 2017

Customer: Odessa

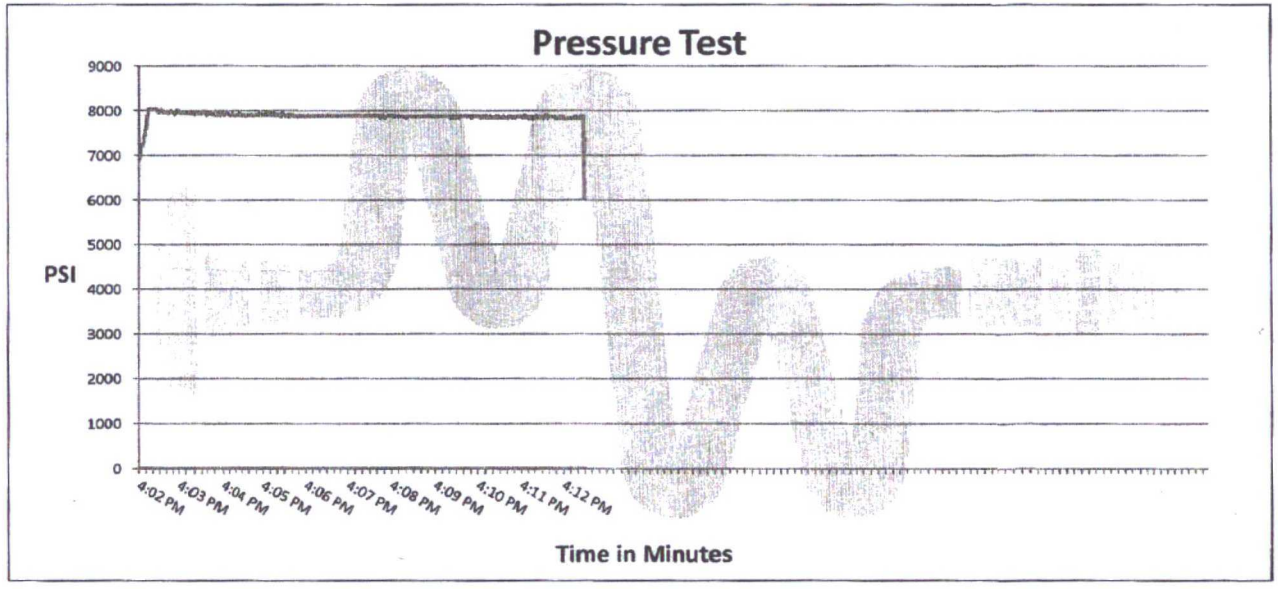
Pick Ticket #: 381942

Hose Specifications

Hose Type	Length
Ck	20'
I.D.	**O.D.**
4"	5.80"
Working Pressure	**Burst Pressure**
5000 PSI	Standard Safety Multiplier Applies

Verification

Type of Fitting	Coupling Method
4"T	Swage
Die Size	**Final O.D.**
6.38"	6.43"
Hose Serial #	**Hose Assembly Serial #**
12442	381942



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
7500 PSI	10 2/4 Minutes		8173 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: *Richard Davis*

x Richard Davis

Approved By: *Charles Ash*

x Charles Ash

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **ODESSA**	*Customer P.O.#* **354159**
Sales Order # **316492**	*Date Assembled:* **1/30/2017**

Specifications

Hose Assembly Type:	**Choke & Kill**	*Rig #*	
Assembly Serial #	**381942**	*Hose Lot # and Date Code*	**12442-12/15**
Hose Working Pressure (psi)	**5000**	*Test Pressure (psi)*	**7500**
Hose Assembly Description:	**CK64-SS-5K-164-164-20.00' FT**		

We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.

Supplier:
Midwest Hose & Specialty, Inc.
3312 S I-35 Service Rd
Oklahoma City, OK 73129

Comments:

Approved By	*Date*
Charles Ash	**1/31/2017**

Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	ODESSA	Hose Assembly Type	Choke & Kill
MWH Sales Representative	CHARLES ASH	Certification	API 7K/FSL LEVEL2
Date Assembled	1/30/2017	Hose Grade	D
Location Assembled	OKC	Hose Working Pressure	5000
Sales Order #	316492	Hose Lot # and Date Code	12442-12/15
Customer Purchase Order #	354159	Hose I.D. (Inches)	4"
Assembly Serial # (Pick Ticket #)	381942	Hose O.D. (Inches)	6.30"
Hose Assembly Length	20FT	Armor (yes/no)	YES

Fittings			
End A		End B	
Stem (Part and Revision #)	R4.0X64T	Stem (Part and Revision #)	R4.0X64T
Stem (Heat #)	40832490	Stem (Heat #)	40832490
Ferrule (Part and Revision #)	RF4.0X6370	Ferrule (Part and Revision #)	RF4.0X6370
Ferrule (Heat #)	12607	Ferrule (Heat #)	12607
Connection . Flange Hammer Union Part		Connection (Part #)	
Connection (Heat #)		Connection (Heat #)	
Nut (Part #)		Nut (Part #)	
Nut (Heat #)		Nut (Heat #)	
Dies Used	6.38"	Dies Used	6.38"

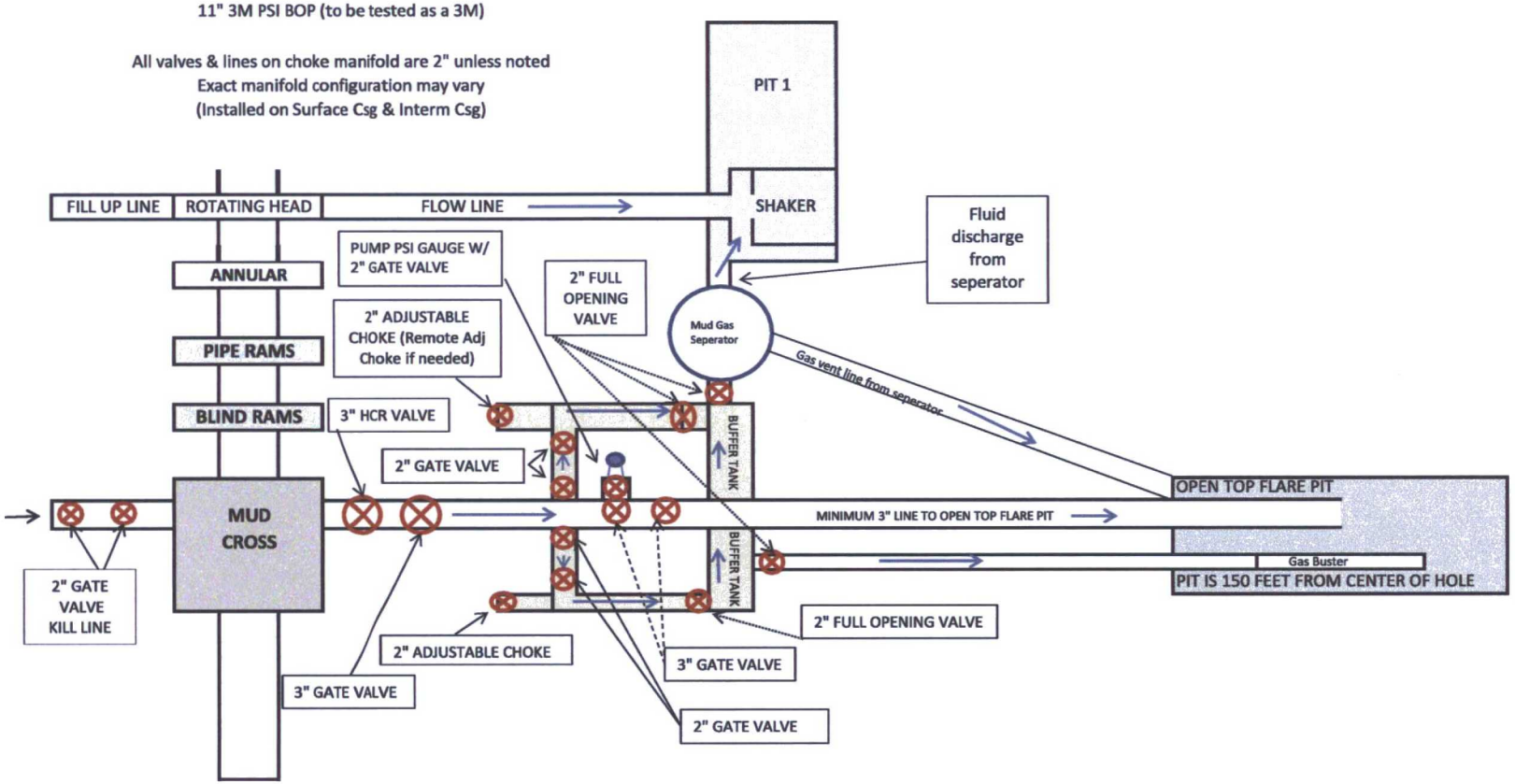
Hydrostatic Test Requirements		
Test Pressure (psi)	7,500	Hose assembly was tested with ambient water temperature.
Test Pressure Hold Time (minutes)	10 1/2	

Date Tested	Tested By	Approved By
1/30/2017	Richard Dix	Charles Ash

APACHE BOP AND CHOKE MANIFOLD SCHEMATIC

11" 3M PSI BOP (to be tested as a 3M)

All valves & lines on choke manifold are 2" unless noted
Exact manifold configuration may vary
(Installed on Surface Csg & Interm Csg)



*** If H2S is encountered in quantities greater than 100ppm, Apache will shut in well & install a remote operated choke ***

MINIMUM SAFETY FACTORS (8 5/8" Surface Casing)

	Depth (MD) (ft)	OD/Weight/Grade	Connection	Minimum Safety Factor (Abs)			
				Burst	Collapse	Axial	Triaxial
1	0	8 5/8", 24.000 ppf, J-55	STC, J-55	1.95 B12	+ 100.00 C2	1.73 A4 J	2.48 B12
2	7			1.96 B5	+ 100.00 C2	1.73 A4 J	2.48 B12
3	750			1.95 B5	6.00 C2	1.94 A4 J	2.49 B5
4	1349			1.95 B5	3.05 C2	2.16 A4 J	2.47 B5
5	1350			1.95 B5	3.05 C2	2.16 A4 J	2.47 B5
6							
7	J	Connection Jump Out					
8	B5	Pressure Test					
9	B12	Green Cement Pressure Test(Burst)					
10	C2	Cementing					
11	A4	Overpull Force					
12							

MINIMUM SAFETY FACTORS (5 1/2" Production Casing)

	Depth (MD) (ft)	OD/Weight/Grade	Connection	Minimum Safety Factor (Abs)			
				Burst	Collapse	Axial	Triaxial
1	0	5 1/2", 17.000 ppf, L-80	LTC, L-80	2.20 B8	+ 100.00 C2	1.64 A4 F	1.90 A4
2	1350			2.20 B8	8.59 C6	1.81 A4 F	2.06 A4
3	4190			2.20 B8	2.80 C6	2.31 A4 F	2.50 A4
4	6800			2.20 B8	1.73 C6	3.11 A4 F	2.56 C6
5	6800			2.20 B8	1.73 C5	3.11 A4 F	2.56 C5
6	6831			2.20 B8	1.72 C5	3.12 A4 F	2.55 C5
7	6850			2.20 B8	1.72 C5	3.13 A4 F	2.54 C5
8	6989			2.20 B8	1.68 C5	3.19 A4 F	2.49 C5
9	6990			2.20 B8	1.68 C5	3.19 A4 F	2.49 C5
10							
11	F	Connection Fracture					
12	B8	Injection Casing					
13	C2	Cementing					
14	C5	Full Evacuation Production					
15	C6	Above Below Packer					
16	A4	Overpull Force					
17							

CEMENT: SURFACE

Stage Tool Depth: N/A

Lead:

Top MD of Segment: 0 | Btm MD of Segment: 800

Cmt Type: C | Cmt Additives: 4% Bentonite, 1% Calcium Chloride

Quantity (sks): 153
Yield (cu/ft/sk): 1.73 | Volume (cu/ft): 265
Density (lbs/gal): 13.5 | Percent Excess: 30%

Tail:

Top MD of Segment: 800 | Btm MD of Segment: 1300

Cmt Type: C | Cmt Additives: 1% Calcium Chloride

Quantity (sks): 124
Yield (cu/ft/sk): 1.33 | Volume (cu/ft): 165
Density (lbs/gal): 14.8 | Percent Excess: 30%

CEMENT: PRODUCTION

Stage Tool Depth: N/A

Lead:

Top MD of Segment: 0 | Btm MD of Segment: 5700

Cmt Type: Light weight Class C | Cmt Additives: 3% sodium chloride

Quantity (sks): 600
Yield (cu/ft/sk): 1.9 | Volume (cu/ft): 1140
Density (lbs/gal): 12.6 | Percent Excess: 20%

Tail:

Top MD of Segment: 5700 | Btm MD of Segment: 6960

Cmt Type: C | Cmt Additives: 0.2% fluid loss additive - mod temp 0.2% retarder - low temp

Quantity (sks): 220

Yield (cu/ft/sk):	1.33	Volume (cu/ft):	292
Density (lbs/gal):	14.8	Percent Excess:	33%

2 Stage Cement Job - Contingency

* DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

*If lost circulation is encountered, Apache may 2-stage Interm csg. A DVT may be used in the 5-1/2" csg & ECP may be pla DVT/

1st Stage

Lead:

Top MD of Segment:	4100	Btm MD of Segment:	5960
Cmt Type:	Light weight Class C	Cmt Additives:	3% Sodium Chloride
Quantity (sks):	225		
Yield (cu/ft/sk):	1.9	Volume (cu/ft):	428
Density (lbs/gal):	12.6	Percent Excess:	33%

Tail:

Top MD of Segment:	5960	Btm MD of Segment:	6960
Cmt Type:	C	Cmt Additives:	0.2% Fluid Loss Additive - Mod Temp 0.2% Retarder - low temp
Quantity (sks):	170		
Yield (cu/ft/sk):	1.33	Volume (cu/ft):	226
Density (lbs/gal):	14.8	Percent Excess:	30%

Stage Tool Depth: 4100

2nd Stage

Lead:

Top MD of Segment:	0	Btm MD of Segment:	3100
Cmt Type:	Light weight Class C	Cmt Additives:	3% Sodium Chloride
Quantity (sks):	368		

Yield (cu/ft/sk):	1.9	Volume (cu/ft):	700	
Density (lbs/gal):	12.6	Percent Excess:	30	

Tail:

Top MD of Segment:	3100	Btm MD of Segment:	4100
Cmt Type:	C	Cmt Additives:	0.2% Fluid Loss Additive - Mod Temp 0.1% Retarder - low temp

Quantity (sks):	165		
Yield (cu/ft/sk):	1.39	Volume (cu/ft):	230
Density (lbs/gal):	14.8	Percent Excess:	30%

CEMENT: SURFACE

Stage Tool Depth: N/A

Lead:

Top MD of Segment: 0
Btm MD of Segment: 800

Cmt Type: C
Cmt Additives: 4% Bentonite, 1% Calcium Chloride

Quantity (sks): 153
Yield (cu/ft/sk): 1.73
Volume (cu/ft): 265
Density (lbs/gal): 13.5
Percent Excess: 30%

Tail:

Top MD of Segment: 800
Btm MD of Segment: 1300

Cmt Type: C
Cmt Additives: 1% Calcium Chloride

Quantity (sks): 124
Yield (cu/ft/sk): 1.33
Volume (cu/ft): 165
Density (lbs/gal): 14.8
Percent Excess: 30%

CEMENT: PRODUCTION

Stage Tool Depth: N/A

Lead:

Top MD of Segment: 0
Btm MD of Segment: 5700

Cmt Type: Light weight Class C
Cmt Additives: 3% sodium chloride

Quantity (sks): 600
Yield (cu/ft/sk): 1.9
Volume (cu/ft): 1140
Density (lbs/gal): 12.6
Percent Excess: 20%

Tail:

Top MD of Segment: 5700
Btm MD of Segment: 6960

Cmt Type: C
Cmt Additives: 0.2% fluid loss additive - mod temp 0.2% retarder - low temp

Quantity (sks): 220

Yield (cu/ft/sk):	1.33	Volume (cu/ft):	292
Density (lbs/gal):	14.8	Percent Excess:	33%

2 Stage Cement Job - Contingency

* DV tool depth(s) will be adjusted based on hole conditions and cement volumes will be adjusted proportionally. DV tool will be set a minimum of 50 feet below previous casing and a minimum of 200 feet above current shoe. Lab reports with the 500 psi compressive strength time for the cement will be onsite for review.

*If lost circulation is encountered, Apache may 2-stage Interm csg. A DVT may be used in the 5-1/2" csg & ECP may be pla DVT/

1st Stage

Lead:

Top MD of Segment:	4100	Btm MD of Segment:	5960
Cmt Type:	Light weight Class C	Cmt Additives:	3% Sodium Chloride
Quantity (sks):	225		
Yield (cu/ft/sk):	1.9	Volume (cu/ft):	428
Density (lbs/gal):	12.6	Percent Excess:	33%

Tail:

Top MD of Segment:	5960	Btm MD of Segment:	6960
Cmt Type:	C	Cmt Additives:	0.2% Fluid Loss Additive - Mod Temp 0.2% Retarder - low temp
Quantity (sks):	170		
Yield (cu/ft/sk):	1.33	Volume (cu/ft):	226
Density (lbs/gal):	14.8	Percent Excess:	30%

Stage Tool Depth: 4100

2nd Stage

Lead:

Top MD of Segment:	0	Btm MD of Segment:	3100
Cmt Type:	Light weight Class C	Cmt Additives:	3% Sodium Chloride
Quantity (sks):	368		

Yield (cu/ft/sk):	1.9	Volume (cu/ft):	700	
Density (lbs/gal):	12.6	Percent Excess:	30	

Tail:

Top MD of Segment:	3100	Btm MD of Segment:	4100
Cmt Type:	C	Cmt Additives:	0.2% Fluid Loss Additive - Mod Temp 0.1% Retarder - low temp

Quantity (sks):	165		
Yield (cu/ft/sk):	1.39	Volume (cu/ft):	230
Density (lbs/gal):	14.8	Percent Excess:	30%

Midwest Hose & Specialty, Inc.

Internal Hydrostatic Test Graph

January 30, 2017

Customer: Odessa

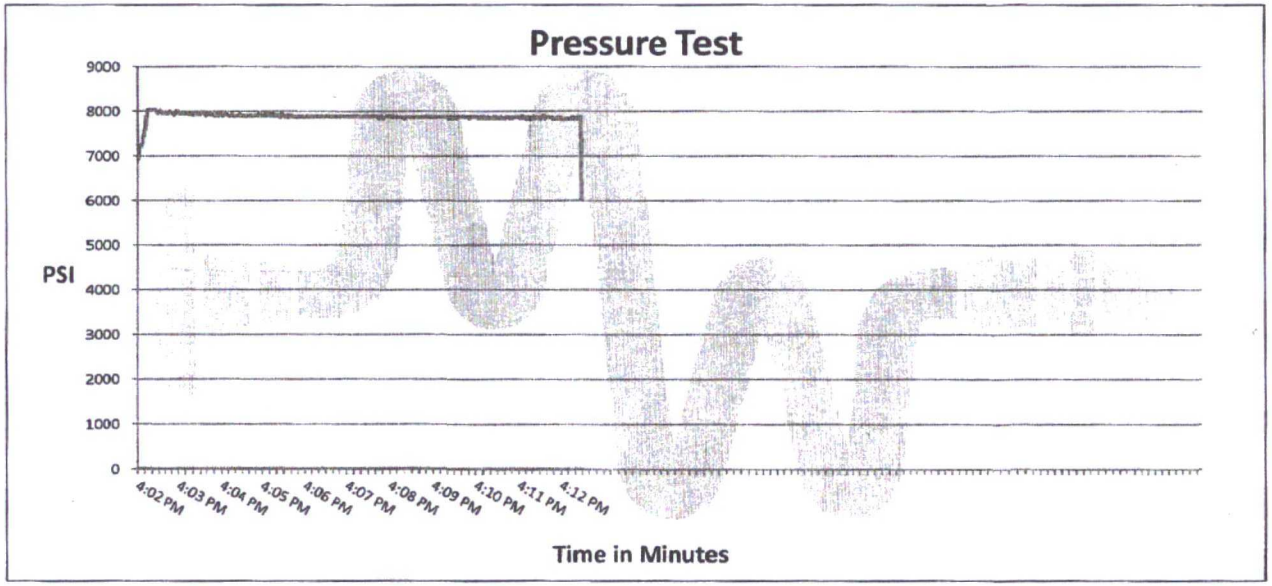
Pick Ticket #: 381942

Hose Specifications

Hose Type	Length
Ck	20'
I.D.	**O.D.**
4"	5.80"
Working Pressure	**Burst Pressure**
5000 PSI	Standard Safety Multiplier Applies

Verification

Type of Fitting	Coupling Method
4"T	Swage
Die Size	**Final O.D.**
6.38"	6.43"
Hose Serial #	**Hose Assembly Serial #**
12442	381942



Test Pressure	Time Held at Test Pressure	Actual Burst Pressure	Peak Pressure
7500 PSI	10 2/4 Minutes		8173 PSI

Comments: Hose assembly pressure tested with water at ambient temperature.

Tested By: *Richard Davis*

x Richard Davis

Approved By: *Charles Ash*

x Charles Ash

Midwest Hose
& Specialty, Inc.

Certificate of Conformity

Customer: **ODESSA**	*Customer P.O.#* **354159**
Sales Order # **316492**	*Date Assembled:* **1/30/2017**

Specifications

Hose Assembly Type:	**Choke & Kill**	*Rig #*	
Assembly Serial #	**381942**	*Hose Lot # and Date Code*	**12442-12/15**
Hose Working Pressure (psi)	**5000**	*Test Pressure (psi)*	**7500**
Hose Assembly Description:	**CK64-SS-5K-164-164-20.00' FT**		

We hereby certify that the above material supplied for the referenced purchase order to be true according to the requirements of the purchase order and current industry standards.

Supplier:
Midwest Hose & Specialty, Inc.
3312 S I-35 Service Rd
Oklahoma City, OK 73129

Comments:

Approved By	*Date*
Charles Ash	**1/31/2017**

Midwest Hose
& Specialty, Inc.

Internal Hydrostatic Test Certificate

General Information		Hose Specifications	
Customer	ODESSA	Hose Assembly Type	Choke & Kill
MWH Sales Representative	CHARLES ASH	Certification	API 7K/FSL LEVEL2
Date Assembled	1/30/2017	Hose Grade	D
Location Assembled	OKC	Hose Working Pressure	5000
Sales Order #	316492	Hose Lot # and Date Code	12442-12/15
Customer Purchase Order #	354159	Hose I.D. (Inches)	4"
Assembly Serial # (Pick Ticket #)	381942	Hose O.D. (Inches)	6.30"
Hose Assembly Length	20FT	Armor (yes/no)	YES

Fittings			
End A		End B	
Stem (Part and Revision #)	R4.0X64T	Stem (Part and Revision #)	R4.0X64T
Stem (Heat #)	40832490	Stem (Heat #)	40832490
Ferrule (Part and Revision #)	RF4.0X6370	Ferrule (Part and Revision #)	RF4.0X6370
Ferrule (Heat #)	12607	Ferrule (Heat #)	12607
Connection . Flange Hammer Union Part		Connection (Part #)	
Connection (Heat #)		Connection (Heat #)	
Nut (Part #)		Nut (Part #)	
Nut (Heat #)		Nut (Heat #)	
Dies Used	6.38"	Dies Used	6.38"

Hydrostatic Test Requirements		
Test Pressure (psi)	7,500	Hose assembly was tested with ambient water temperature.
Test Pressure Hold Time (minutes)	10 1/2	

Date Tested	Tested By	Approved By
1/30/2017	Richard Dix	Charles Ash

APD ID: 10400011701 **Submission Date:** 02/23/2017

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Well Type: INJECTION - ENHANCED RECOVERY **Well Work Type:** Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

WBDU184_ExistRd_02-21-2017.pdf

Existing Road Purpose: ACCESS **Row(s) Exist?** NO

ROW ID(s)

ID:

Do the existing roads need to be improved? NO

Existing Road Improvement Description:

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

WBDU184_NewRoad_02-22-2017.pdf

New road type: LOCAL

Length: 42.58 Feet **Width (ft.):** 25

Max slope (%): 2 **Max grade (%):** 2

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 14

New road access erosion control: ROAD WILL BE CROWNED FOR WATER DRAINAGE AND TO CONTROL EROSION

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: Caliche provided by lessor pursuant Surface Use Agmt

Access onsite topsoil source depth: 6

Offsite topsoil source description:

Onsite topsoil removal process: Topsoil will be stockpiled on the North end of well pad. Topsoil will be used for reclamation.

Access other construction information:

Access miscellaneous information:

Number of access turnouts: **Access turnout map:**

Drainage Control

New road drainage crossing: OTHER

Drainage Control comments: ROAD WILL BE CROWNED FOR WATER DRAINAGE

Road Drainage Control Structures (DCS) description: ROAD WILL BE CROWNED TO ALLOW FOR WATER DRAINAGE

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

WBDU184W_1MileRadius_02-22-2017.pdf

Existing Wells description:

Section 4 - Location of Existing and/or Proposed Production Facilities

Submit or defer a Proposed Production Facilities plan? SUBMIT

Estimated Production Facilities description:

Production Facilities description: A 2" inch, 1104.53 foot, buried fiberglass inj line, rated 2500 psi, will be installed from proposed well to proposed offsite facility. A 30 feet wide disturbance will be needed to install buried PL. In areas where blading is allowed, topsoil will be stockpiled and separated from excavated trench mineral material. Final reclamation procedures will match procedures in plans for surface reclamation. When excavated soil is backfilled, it will be compacted to prevent subsidence. No berm over pipeline will be evident. The proposed pipeline does not cross lease boundaries, so a ROW will not need to be acquired from BLM.

Production Facilities map:

WBDU184_PL_02-22-2017.pdf

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: INTERMEDIATE/PRODUCTION CASING **Water source type:** OTHER

Describe type: BRINE

Source latitude: 32.429707 **Source longitude:** -103.14985

Source datum: NAD83

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: TRUCKING

Source transportation land ownership: PRIVATE

Water source volume (barrels): 4000 **Source volume (acre-feet):** 0.51557237

Source volume (gal): 168000

Water source use type: INTERMEDIATE/PRODUCTION CASING, SURFACE CASING **Water source type:** GW WELL

Describe type:

Source latitude: 32.6878 **Source longitude:** -103.11203

Source datum: NAD83

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: TRUCKING

Source transportation land ownership: PRIVATE

Water source volume (barrels): 2000 **Source volume (acre-feet):** 0.25778618

Source volume (gal): 84000

Water source and transportation map:

WBDU184_Brine_Route_02-22-2017.pdf
WBDU184_FW_02-22-2017.pdf

Water source comments:

New water well? NO

New Water Well Info

Well latitude: **Well Longitude:** **Well datum:**

Well target aquifer:

Est. depth to top of aquifer(ft): **Est thickness of aquifer:**

Aquifer comments:

Aquifer documentation:

Well depth (ft): **Well casing type:**

Well casing outside diameter (in.): **Well casing inside diameter (in.):**

New water well casing? **Used casing source:**

Drilling method: **Drill material:**

Grout material: **Grout depth:**

Casing length (ft.): **Casing top depth (ft.):**

Well Production type: **Completion Method:**

Water well additional information:

State appropriation permit:

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: Caliche provided by lessor pursuant surface use agmt.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: DRILLING

Waste content description: Drilling fluid, during drilling ops and completion ops, will be stored safely and recycled to next well. Any excess will be hauled to approved NMOCD disposal facility
Amount of waste: 2000 barrels

Waste disposal frequency : Monthly

Safe containment description: Drilling fluids will be stored in sealed frac tanks

Safe containmant attachment:

Waste disposal type: RECYCLE **Disposal location ownership:** OTHER

Disposal type description:

Disposal location description: Next well or trucked to an approved disposal facility

Waste type: DRILLING

Waste content description: Excess cement returns

Amount of waste: 40 barrels

Waste disposal frequency : Weekly

Safe containment description: Cement returns will be stored in steel roll off bins

Safe containmant attachment:

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Waste disposal type: OTHER **Disposal location ownership:** PRIVATE

Disposal type description: Haul to private facility

Disposal location description: R360, 6601 W Hobbs Hwy, Carlsbad, NM 88220

Waste type: GARBAGE

Waste content description: Garbage and trash produced during drilling and completion operations

Amount of waste: 1500 pounds

Waste disposal frequency : Weekly

Safe containment description: Garbage and trash produced during drilling and completion ops will be collected in portable trash trailers and disposed of properly at a state approved disposal facility.

Safe containmant attachment:

Waste disposal type: OTHER **Disposal location ownership:** STATE

Disposal type description: land fill

Disposal location description: Lea County Landfill

Waste type: SEWAGE

Waste content description: Human waste and grey water

Amount of waste: 2000 gallons

Waste disposal frequency : Weekly

Safe containment description: Waste will be properly contained and disposed of properly at a state approved disposal facility

Safe containmant attachment:

Waste disposal type: OTHER **Disposal location ownership:** STATE

Disposal type description: Municipal waste facility

Disposal location description: Hobbs Municipal Waste Facility

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit?

Reserve pit length (ft.) **Reserve pit width (ft.)**

Reserve pit depth (ft.) **Reserve pit volume (cu. yd.)**

Is at least 50% of the reserve pit in cut?

Reserve pit liner

Reserve pit liner specifications and installation description

Cuttings Area

Cuttings Area being used? NO

Are you storing cuttings on location? YES

Description of cuttings location Cuttings will be stored in steel haul off bins and taken to an NMOCD approved disposal facility

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

Is at least 50% of the cuttings area in cut?

WCuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary Facilities

Are you requesting any Ancillary Facilities?: NO

Ancillary Facilities attachment:

Comments:

Section 9 - Well Site Layout

Well Site Layout Diagram:

WBDU184_WellsiteLayout_02-22-2017.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: NEW

Recontouring attachment:

Drainage/Erosion control construction: During construction, proper erosion control methods will be used to control erosion, runoff and siltation of surrounding area

Drainage/Erosion control reclamation: Proper erosion control methods will be used to control erosion, runoff and siltation of surrounding areas

Wellpad long term disturbance (acres): 3.902

Wellpad short term disturbance (acres): 3.902

Access road long term disturbance (acres): 0.028

Access road short term disturbance (acres): 0.028

Pipeline long term disturbance (acres): 0.7606956

Pipeline short term disturbance (acres): 0.7606956

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0

Total long term disturbance: 4.690696

Total short term disturbance: 4.690696

Reconstruction method: The areas planned for interim reclamation will then be recontoured to the original contour if feasible, or if not feasible, to an interim contour that blends with surrounding topography as much as possible. Where applicable, any fill material of well pad will be backfilled into the cut to bring area back to original contour.
Topsoil redistribution: Topsoil will be evenly distributed and aggressively revegitated over the entire disturbed area not needed for all-weather operations.
Soil treatment: After all disturbed areas have been properly prepared, areas will need to be seeded with recommended seed mixture, free of noxious weeds. Final seedbed prep will consist of contour cultivating to a depth of 4-6 inches within 24 hrs prior to seeding, dozer tracking or other imprinting in order to break soil crust to create seed germination micro-sites.
Existing Vegetation at the well pad:

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road:

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline:

Existing Vegetation Community at the pipeline attachment:

Existing Vegetation Community at other disturbances:

Existing Vegetation Community at other disturbances attachment:

Non native seed used? NO

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? NO

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? NO

Seed harvest description:

Seed harvest description attachment:

Seed Management

Seed Table

Seed type:

Seed source:

Seed name:

Source name:

Source address:

Source phone:

Seed cultivar:

Seed use location:

PLS pounds per acre:

Proposed seeding season:

Seed Summary

Total pounds/Acre:

Seed Type	Pounds/Acre

Seed reclamation attachment:

Operator Contact/Responsible Official Contact Info

First Name: **Last Name:**

Phone: **Email:**

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? NO

Existing invasive species treatment description:

Existing invasive species treatment attachment:

Weed treatment plan description: No invasive species present. Standard regular maintenance to maintain to maintain a clear location and road.
Weed treatment plan attachment:

Monitoring plan description: Identify area supporting weeds prior to construction, prevent introduction and spread of weeds from construction equipment during construction and contain weed seeds and propagules by preventing segregated topsoil from being spread to adjacent areas. No invasive species present. Standard regular maintenance to maintain a clear location and road.
Monitoring plan attachment:

Success standards: Maintain all disturbed areas as per Gold Book standards

Pit closure description: N/A

Pit closure attachment:

Section 11 - Surface Ownership

Disturbance type: WELL PAD

Describe:

Surface Owner: PRIVATE OWNERSHIP

Other surface owner description:

BIA Local Office:

BOR Local Office:

COE Local Office:

DOD Local Office:

NPS Local Office:

State Local Office:

Military Local Office:

USFWS Local Office:

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Other Local Office:

USFS Region:

USFS Forest/Grassland: **USFS Ranger District:**

Fee Owner: MILLARD DECK ESTATE c/o Bank of America
Phone: (817)390-6994

Fee Owner Address: PO Box 1479, Ft Worth, TX 76101

Email:

Surface use plan certification: YES

Surface use plan certification document:

WBDU184_PrivateSurfOwnerAgmt_02-23-2017.pdf

Surface access agreement or bond: Agreement

Surface Access Agreement Need description: Surface access agmt has been negotiated with private land owner. No bond necessary

Surface Access Bond BLM or Forest Service:

BLM Surface Access Bond number:

USFS Surface access bond number:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

SUPO Additional Information: Onsite completed by Jeffery Robertson on 12/6/2016. Arch survey has been completed by Boone Arch Services. Operator Rep: Larry VanGilder, Drlg Supt, 432-818-1965 or 432-557-1097; Operator Production Rep: Keith Phillips. 575-394-1503

Use a previously conducted onsite? NO

Previous Onsite information:

Other SUPO Attachment

PRIVATE SURFACE OWNER AGREEMENT

OPERATOR: APACHE CORPORATION

WELL NAME: WEST BLINEBRY DRINKARD UNIT 184W

SECTION: 8 TOWNSHIP: 21S RANGE: 37E

LOCATION: SHL: 1820' FSL & 2300' FWL COUNTY: LEA STATE: NM

LEASE NUMBER: NMNM-90161

STATEMENT OF SURFACE USE

The surface to the subject land is owned by MILLARD DECK ESTATE
c/o U.S. TRUST BANK OF AMERICA
ATTN: SHANE COLE
PO BOX 1479
(817)-390-6994 FORT WORTH, TX 76101

The surface owner has been contacted regarding the drilling of the subject well, and an agreement for surface use has been negotiated.

CERTIFICATION: I hereby certify that the statements made in this statement are to the best of my knowledge, true and correct.

NAME: DEAN JARRETT

SIGNATURE: Dean Jarrett

DATE: 2-20-2017

TITLE: SR. SURFACE LANDMAN

To expedite your Application to Drill please fax the completed form to the
Bureau of Land Management (575) 234-5927 or (575) 885-9264
Attn: Legal Instruments Examiner
620 E. Green Street
Carlsbad, NM 88220

The original document with signature should be mailed as soon as possible.

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

PWD Data Report
05/14/2017

Section 1 - General

Would you like to address long-term produced water disposal? NO

Section 2 - Lined Pits

Would you like to utilize Lined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit specifications:

Pit liner description:

Pit liner manufacturers information:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule attachment:

Lined pit reclamation description:

Lined pit reclamation attachment:

Leak detection system description:

Leak detection system attachment:

Lined pit Monitor description:

Lined pit Monitor attachment:

Lined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Lined pit bond number:

Lined pit bond amount:

Additional bond information attachment:

Section 3 - Unlined Pits

Would you like to utilize Unlined Pit PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit specifications:

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal permit:

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule attachment:

Unlined pit reclamation description:

Unlined pit reclamation attachment:

Unlined pit Monitor description:

Unlined pit Monitor attachment:

Do you propose to put the produced water to beneficial use?

Beneficial use user confirmation:

Estimated depth of the shallowest aquifer (feet):

Does the produced water have an annual average Total Dissolved Solids (TDS) concentration equal to or less than that of the existing water to be protected?

TDS lab results:

Geologic and hydrologic evidence:

State authorization:

Unlined Produced Water Pit Estimated percolation:

Unlined pit: do you have a reclamation bond for the pit?

Is the reclamation bond a rider under the BLM bond?

Unlined pit bond number:

Unlined pit bond amount:

Additional bond information attachment:

Section 4 - Injection

Would you like to utilize Injection PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Injection PWD discharge volume (bbl/day):

Injection well mineral owner:

Injection well type:

Injection well number: **Injection well name:**

Assigned injection well API number? **Injection well API number:**

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Section 5 - Surface Discharge

Would you like to utilize Surface Discharge PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Surface discharge PWD discharge volume (bbl/day):

Surface Discharge NPDES Permit?

Surface Discharge NPDES Permit attachment:

Surface Discharge site facilities information:

Surface discharge site facilities map:

Section 6 - Other

Would you like to utilize Other PWD options? NO

Produced Water Disposal (PWD) Location:

PWD surface owner: **PWD disturbance (acres):**

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type attachment:

Have other regulatory requirements been met?

Other regulatory requirements attachment:

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Bond Info Data Report

05/14/2017

Bond Information

Federal/Indian APD: FED

BLM Bond number: NMB000736

BIA Bond number:

Do you have a reclamation bond? NO

Is the reclamation bond a rider under the BLM bond?

Is the reclamation bond BLM or Forest Service?

BLM reclamation bond number:

Forest Service reclamation bond number:

Forest Service reclamation bond attachment:

Reclamation bond number:

Reclamation bond amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Operator Certification Data Report

05/14/2017

Operator Certification

I hereby certify that I, or someone under my direct supervision, have inspected the drill site and access route proposed herein; that I am familiar with the conditions which currently exist; that I have full knowledge of state and Federal laws applicable to this operation; that the statements made in this APD package are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed in conformity with this APD package and the terms and conditions under which it is approved. I also certify that I, or the company I represent, am responsible for the operations conducted under this application. These statements are subject to the provisions of 18 U.S.C. 1001 for the filing of false statements.

NAME: Sorina Flores

Signed on: 02/22/2017

Title: Supv of Drilling Services

Street Address: 303 Veterans Airpark Ln #1000

City: Midland **State:** TX **Zip:** 79705

Phone: (432)818-1167

Email address: sorina.flores@apachecorp.com

Field Representative

Representative Name:

Street Address:

City: **State:** **Zip:**

Phone:

Email address:

AFMSS

U.S. Department of the Interior
BUREAU OF LAND MANAGEMENT

Application Data Report
05/14/2017

APD ID: 10400011701 **Submission Date:** 02/23/2017

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Well Type: INJECTION - ENHANCED RECOVERY **Well Work Type:** Drill

Section 1 - General

APD ID: 10400011701 **Tie to previous NOS?** 10400008165 **Submission Date:** 02/23/2017

BLM Office: CARLSBAD **User:** Sorina Flores **Title:** Supv of Drilling Services

Federal/Indian APD: FED **Is the first lease penetrated for production Federal or Indian?** FED

Lease number: NMNM90161 **Lease Acres:** 640

Surface access agreement in place? **Allotted?** **Reservation:**

Agreement in place? YES **Federal or Indian agreement:** FEDERAL

Agreement number: NMNM120042X

Agreement name: W BLINEBRY DRINKARD

Keep application confidential? YES

Permitting Agent? NO **APD Operator:** APACHE CORPORATION

Operator letter of designation:

Keep application confidential? YES

Operator Info

Operator Organization Name: APACHE CORPORATION

Operator Address: 303 Veterans Airpark Lane #1000

Zip: 79705

Operator PO Box:

Operator City: Midland **State:** TX

Operator Phone: (432)818-1000

Operator Internet Address:

Section 2 - Well Information

Well in Master Development Plan? NO **Mater Development Plan name:**

Well in Master SUPO? NO **Master SUPO name:**

Well in Master Drilling Plan? NO **Master Drilling Plan name:**

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184 **Well API Number:**

Field/Pool or Exploratory? Field and Pool **Field Name:** DRINKARD **Pool Name:** EUNICE; BLI-TU-DR, N

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Is the proposed well in an area containing other mineral resources? NATURAL GAS,OIL,POTASH

Describe other minerals:

Is the proposed well in a Helium production area? N **Use Existing Well Pad?** NO **New surface disturbance?**

Type of Well Pad: SINGLE WELL **Multiple Well Pad Name:** **Number:**

Well Class: VERTICAL **Number of Legs:** 1

Well Work Type: Drill

Well Type: INJECTION - ENHANCED RECOVERY

Describe Well Type:

Well sub-Type: INJECTION - SECONDARY RECOVERY

Describe sub-type: DEVELOPMENT

Distance to town: 4.5 Miles **Distance to nearest well:** 470 FT **Distance to lease line:** 1820 FT

Reservoir well spacing assigned acres Measurement: 40 Acres

Well plat: WBDU184_PlatREV_NAD83_signed_02-21-2017.pdf

Well work start Date: 05/15/2017 **Duration:** 10 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 **Vertical Datum:** NAVD88

Survey number:

	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.4911929	**Longitude:** -103.1862373	
SHL	**Elevation:** 3519	**MD:** 0	**TVD:** 0
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM90161	
	NS-Foot: 1820	**NS Indicator:** FSL	
	EW-Foot: 2300	**EW Indicator:** FWL	
	Twsp: 21S	**Range:** 37E	**Section:** 8
	Aliquot: NESW	**Lot:**	**Tract:**

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

	STATE:	**Meridian:**	**County:**
	Latitude:	**Longitude:**	
KOP	**Elevation:**	**MD:**	**TVD:**
Leg #: 1	**Lease Type:**	**Lease #:**	
	NS-Foot:	**NS Indicator:**	
	EW-Foot:	**EW Indicator:**	
	Twsp:	**Range:**	**Section:**
	Aliquot:	**Lot:**	**Tract:**
	STATE:	**Meridian:**	**County:**
	Latitude:	**Longitude:**	
PPP	**Elevation:**	**MD:**	**TVD:**
Leg #: 1	**Lease Type:**	**Lease #:**	
	NS-Foot:	**NS Indicator:**	
	EW-Foot:	**EW Indicator:**	
	Twsp:	**Range:**	**Section:**
	Aliquot:	**Lot:**	**Tract:**
	STATE:	**Meridian:**	**County:**
	Latitude:	**Longitude:**	
EXIT	**Elevation:**	**MD:**	**TVD:**
Leg #: 1	**Lease Type:**	**Lease #:**	
	NS-Foot:	**NS Indicator:**	
	EW-Foot:	**EW Indicator:**	
	Twsp:	**Range:**	**Section:**
	Aliquot:	**Lot:**	**Tract:**
	STATE: NEW MEXICO	**Meridian:** NEW MEXICO PRINCIPAL	**County:** LEA
	Latitude: 32.4911929	**Longitude:** -103.1862373	
BHL	**Elevation:** -3441	**MD:** 6960	**TVD:** 6960
Leg #: 1	**Lease Type:** FEDERAL	**Lease #:** NMNM90161	
	NS-Foot: 1820	**NS Indicator:** FSL	
	EW-Foot: 2300	**EW Indicator:** FWL	

Operator Name: APACHE CORPORATION

Well Name: WEST BLINEBRY DRINKARD UNIT **Well Number:** 184

Twsp: 21S **Range:** 37E **Section:** 8

Aliquot: NESW **Lot:** **Tract:**