

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

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

F/F

APPLICATION FOR PERMIT TO DRILL OR REENTER **INTER 03 2018**

HOBBS OCD
RECEIVED

5. Lease Serial No. NMNM27506		6. If Indian, Allottee or Tribe Name	
7. If Unit or CA Agreement, Name and No.		8. Lease Name and Well No. (320547) SD EA 29 32 FED COM P11 13H	
9. API Well No. 30-025-44333		10. Field and Pool, or Exploratory (98097) WC025G09S263327G / UPPER WOLFC	
11. Sec., T. R. M. or Blk. and Survey or Area SEC 29 / T26S / R33E / NMP		12. County or Parish LEA	
13. State NM		14. Distance in miles and direction from nearest town or post office* 33 miles	
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330 feet	16. No. of acres in lease 1517.74	17. Spacing Unit dedicated to this well 237.34	
18. Distance from proposed location* to nearest well, drilling, completed, 25 feet applied for, on this lease, ft. 25 feet	19. Proposed Depth 12213 feet / 23000 feet	20. BLM/BIA Bond No. on file FED: CA0329	
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 3215 feet	22. Approximate date work will start* 10/15/2017	23. Estimated duration 130 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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification |
| 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). | 6. Such other site specific information and/or plans as may be required by the BLM. |

25. Signature (Electronic Submission)	Name (Printed/Typed) Denise Pinkerton / Ph: (432)687-7375	Date 07/12/2017
Title Regulatory Specialist		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Bobby Ballard / Ph: (575)234-2235	Date 12/20/2017
Title Natural Resource Specialist		
Office 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
Approval Date: 12/20/2017

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01/08/18

Double Filed

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.

Additional Operator Remarks

Location of Well

1. SHL: NWNW / 195 FNL / 828 FWL / TWSP: 26S / RANGE: 33E / SECTION: 29 / LAT: 32.021226 / LONG: -103.600135 (TVD: 0 feet, MD: 0 feet)

PPP: NWNW / 330 FNL / 330 FWL / TWSP: 26S / RANGE: 33E / SECTION: 29 / LAT: 32.020855 / LONG: -103.601741 (TVD: 9000 feet, MD: 12000 feet)

BHL: LOT 4 / 180 FSL / 330 FWL / TWSP: 26S / RANGE: 33E / SECTION: 32 / LAT: 32.000736 / LONG: -103.601707 (TVD: 12213 feet, MD: 23000 feet)

BLM Point of Contact

Name: Judith Yeager

Title: Legal Instruments Examiner

Phone: 5752345936

Email: jyeager@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.

Approval Date: 12/20/2017

(Form 3160-3, page 4)



APD ID: 10400015075

Submission Date: 07/12/2017

Highlighted data reflects the most recent changes

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400015075

Tie to previous NOS?

Submission Date: 07/12/2017

BLM Office: CARLSBAD

User: Denise Pinkerton

Title: Regulatory Specialist

Federal/Indian APD: FED

Is the first lease penetrated for production Federal or Indian? FED

Lease number: NMNM27506

Lease Acres: 1517.74

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? NO

Permitting Agent? NO

APD Operator: CHEVRON USA INCORPORATED

Operator letter of designation:

Operator Info

Operator Organization Name: CHEVRON USA INCORPORATED

Operator Address: 6301 Deauville Blvd.

Zip: 79706

Operator PO Box:

Operator City: Midland

State: TX

Operator Phone: (432)687-7866

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: SD EA 29 32 FED COM P11

Well Number: 13H

Well API Number:

Field/Pool or Exploratory? Field and Pool

Field Name:
WC025G09S263327G

Pool Name: UPPER
WOLFCAMP

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

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

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: MULTIPLE WELL

Multiple Well Pad Name: SD EA Number: 13 14 15 16
29 32 FED COM P11

Well Class: HORIZONTAL

Number of Legs: 1

Well Work Type: Drill

Well Type: OIL WELL

Describe Well Type:

Well sub-Type: INFILL

Describe sub-type:

Distance to town: 33 Miles

Distance to nearest well: 25 FT

Distance to lease line: 330 FT

Reservoir well spacing assigned acres Measurement: 237.34 Acres

Well plat: SD_EA_29_32_FED_COM_P11_13H_C_102_06-13-2017.pdf

Well work start Date: 10/15/2017

Duration: 130 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NAVD88

Survey number:

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
SHL Leg #1	195	FNL	828	FWL	26S	33E	29	Aliquot NWN W	32.02122 6	- 103.6001 35	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 27506	321 5	0	0
KOP Leg #1	195	FNL	828	FWL	26S	33E	29	Aliquot NWN W	32.02122 6	- 103.6001 35	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 27506	321 5	0	0
PPP Leg #1	330	FNL	330	FWL	26S	33E	29	Aliquot NWN W	32.02085 5	- 103.6017 41	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 27506	- 578 5	120 00	900 0

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

	NS-Foot	NS Indicator	EW-Foot	EW Indicator	Twsp	Range	Section	Aliquot/Lot/Tract	Latitude	Longitude	County	State	Meridian	Lease Type	Lease Number	Elevation	MD	TVD
EXIT Leg #1	330	FSL	330	FWL	26S	33E	32	Lot 4	32.00114 9	- 103.6017 08	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 578 5	120 00	900 0
BHL Leg #1	180	FSL	330	FWL	26S	33E	32	Lot 4	32.00073 6	- 103.6017 07	LEA	NEW MEXI CO	NEW MEXI CO	S	STATE	- 899 8	230 00	122 13

State of New Mexico
 Lands & Natural Resources Department
 CONSERVATION DIVISION
 100 South St. Francis Dr.
 Santa Fe, NM 87505

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

WELL AND ACREAGE DEDICATION PLAT

	1 Pool Name WC025G09S263327G; UPPER WOLF CAMP	
	3 Property Name EA 29 32 FED COM P11	6 Well Number 13H
	4 Operator Name CHEVRON U.S.A. INC.	9 Elevation 3215'

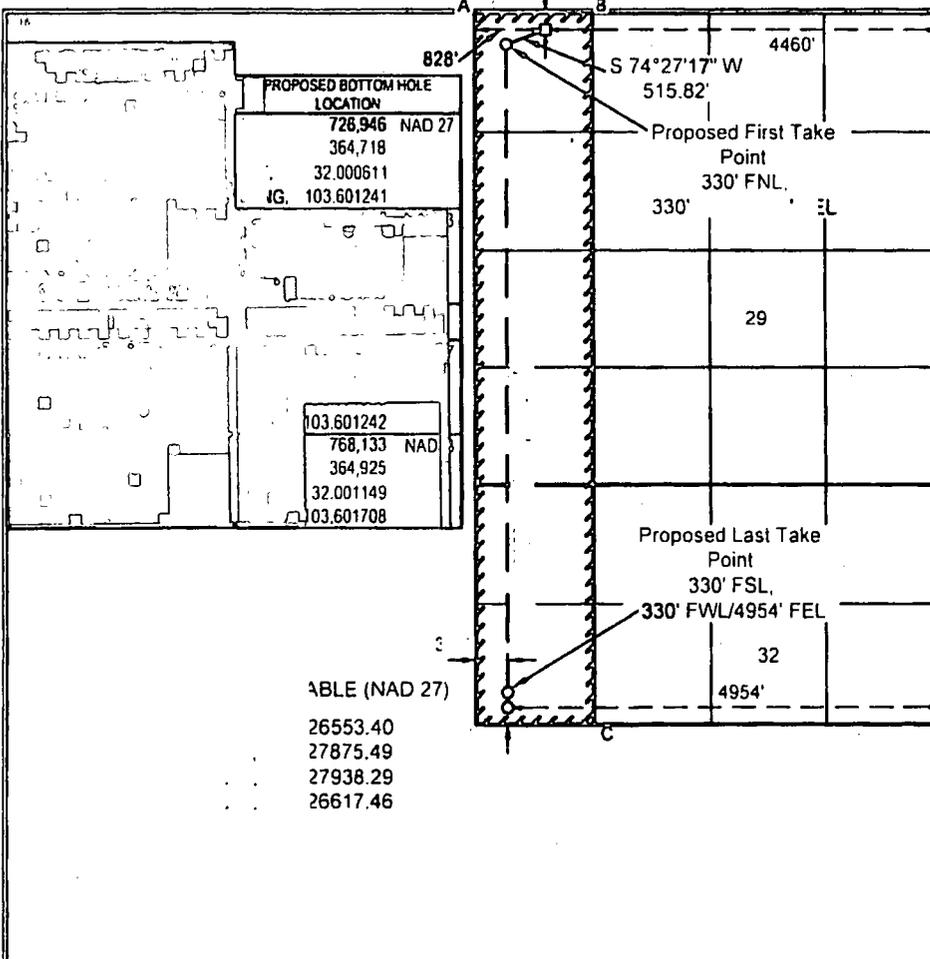
10 Surface Location

	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
		195'	NORTH	828'	WEST	LEA

11 Well Location If Different From Surface

	M.P.M.	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
			180'	SOUTH	330'	WEST	LEA
Code		11 Order No.					

all interests have been consolidated or a non-standard unit has been approved by the



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns, has an interest in, or has a right to drill this well at this location or has a right to drill this well at this location pursuant to a contract with an owner of such a mineral or interest or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Signature: *[Signature]* Date: 6-13-17
 Name: Roman Fuentes
 E-mail Address: djw@chevron.com

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Signature: *[Signature]*
 Name: Robert L. Lastrapes
 Title: Professional Surveyor
 License No: 23006
 Date: 6-13-2017

Certificate Number: 23006



APD ID: 10400015075

Submission Date: 07/12/2017

Highlighted data reflects the most recent changes

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical Depth	Measured Depth	Lithologies	Mineral Resources	Producing Formation
1	RUSTLER	3215	800	800	ANHYDRITE	NONE	No
2	CASTILE	-3480	3480	3480		NONE	No
3	LAMAR	-4900	4900	4900	LIMESTONE	NONE	No
4	BELL CANYON	-4930	4930	4930	SANDSTONE	NONE	No
5	CHERRY CANYON	-5970	5970	5970	SANDSTONE	NONE	No
6	BRUSHY CANYON	-7620	7620	7620	SANDSTONE	NONE	No
7	BONE SPRING LIME	-9090	9090	9090	LIMESTONE	NONE	No
8	AVALON SAND	-9120	9120	9120	SANDSTONE	NONE	No
9	BONE SPRING 1ST	-10040	10040	10040	SANDSTONE	NONE	No
10	BONE SPRING 2ND	-10700	10700	10700	SHALE	NONE	No
11	BONE SPRING 3RD	-11740	11740	11740	LIMESTONE	NONE	No
12	WOLFCAMP	-12140	12140	23000	MUDSTONE	NATURAL GAS,OIL	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 10M

Rating Depth: 12213

Equipment: Will have a minimum of a 10000 psi rig stack (see proposed schematic) for drill out below surface casing. Wolfcamp is not exposed until drillout of the inter csg. Could possibly use the 5M rig stack for drillout below surf csg due to availability of 10M annular. Stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed unless approval from BLM is received otherwise. Flex choke hose will be used for all wells on the pad. BOP test will be conducted by a 3rd party.

Requesting Variance? YES

Variance request: Chevron requests a variance to use a FMC UH2 Multibowl wellhead, which will be run through the rig floor on surface casing. BOPE will be nipped up and tested after cementing surface casing. Subsequent tests will be performed as

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

needed, not to exceed 30 days. The field report from FMC and BOP test information will be provided in a subsequent report at the end of the well. Please see the attached wellhead schematic. An installation manual has been placed on file with the BLM office and remains unchanged from previous submittal. ALSO, REQUEST VARIANCE TO USE FLEX CHOKE HOSE ON ALL WELLS ON THE PAD. (SEE ATTACHED SPEC)

Testing Procedure: Test BOP from 250 psi to 5000 psi in Ram and 250 psi to 3500 psi in Annular. A full BOP test will be performed unless approval from BLM is recvd otherwise. BOP test will be conducted by a 3rd party. Subsequent tests will be performed as needed, not to exceed 30 days. The field report from FMC & BOP test info will be provided in a subsequent report at the end of the well. Installation manual has been placed on file with the BLM office and remains unchanged from previous submittal.

Choke Diagram Attachment:

Choke_hose_Spec_X30_20170918075809.pdf

1684_001_20170918075826.pdf

BOP Diagram Attachment:

10M_BOP_Choke_Schematics_BLM_new_20170918075846.pdf

UH_2_10K_20170918075858.pdf

Section 3 - Casing

Casing ID	String Type	Hole Size	Csg Size	Condition	Standard	Tapered String	Top Set MD	Bottom Set MD	Top Set TVD	Bottom Set TVD	Top Set MSL	Bottom Set MSL	Calculated casing length MD	Grade	Weight	Joint Type	Collapse SF	Burst SF	Joint SF Type	Joint SF	Body SF Type	Body SF
1	SURFACE	17.5	13.375	NEW	API	N	0	800	0	800	-8998	-9798	800	J-55	55	STC	3.12	1.36	DRY	1.7	DRY	3.17
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	11500	0	11500	-8998	-20498	11500	HCL-80	43.5	LTC	1.44	1.12	DRY	1.37	DRY	1.93
3	PRODUCTION	8.5	5.5	NEW	API	N	0	22300	0	22300	-8998	-31998	22300	P-110	20	OTHER - TXP	1.23	1.11	DRY	1.97	DRY	1.37

Casing Attachments

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

Casing Attachments

Casing ID: 1 **String Type:** SURFACE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

SD_EA_29_32_P11_13H_9_PT_PLAN_20170918081752.pdf

Casing ID: 2 **String Type:** INTERMEDIATE

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

SD_EA_29_32_P11_13H_9_PT_PLAN_20170918081848.pdf

9.625_43.5lb_L80IC_LTC_20170918082017.pdf

Casing ID: 3 **String Type:** PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

SD_EA_29_32_P11_13H_9_PT_PLAN_20170918082039.pdf

TenarisXP_BTC_5.500_20_P110_ICY_20170918082057.PDF

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Top MD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead		0	800	650	1.33	14.8	6.57	50	CLASS C	NONE

INTERMEDIATE	Lead		0	4570	1070	2.39	11.9	13.46	100	C	CLASS C
INTERMEDIATE	Tail		4570	4870	89	1.33	14.8	6.35	25	CLASS C	NONE
INTERMEDIATE	Lead	4870	4870	1065 0	1024	2.21	11.9	12.18	25	50:50 POZ CLASS C	NONE
INTERMEDIATE	Tail		1065 0	1115 0	184	1.22	15.6	5.37	25	CLASS H	NONE
PRODUCTION	Lead		1035 0	2230 0	2500	1.2	15.6	5.05	10	ACID SOLUBLE	NONE

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: a closed system will be utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical port-toilet and then hauled to an approved sanitary landfill. all fluids and cuttings will be disposed of in accordance with NMOCD regulations.

Describe the mud monitoring system utilized: a mud test shall be performed every 24 hours after mudding up to determine as applicable density viscosity, gel strength, filtration, and pH. Visual Mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated a PVT, Stroke counter, flow sensor, will be used to detect volume changes indicating loss or gain of circulating fluid volume

Circulating Medium Table

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

Top Depth	Bottom Depth	Mud Type	Min Weight (lbs/gal)	Max Weight (lbs/gal)	Density (lbs/cu ft)	Gel Strength (lbs/100 sqft)	PH	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
1115 0	1230 0	OIL-BASED MUD	9.5	13.5							
0	800	SPUD MUD	8.3	8.7							
800	1115 0	OIL-BASED MUD	8.7	9.2							
1230 0	2230 0	OIL-BASED MUD	9.5	13.5							the mud weights will range depending on the targeted formation. a weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate. To control pressure we are using 11.0 and may end up using heavier mud weight 13.0-14.0.

Section 6 - Test, Logging, Coring

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

drill stem tests are not planned

the logging program attached to 9PT Plan

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

CBL,GR,MWD

Coring operation description for the well:

conventional whole core samples are not planned
a direction survey will be run

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 8573

Anticipated Surface Pressure: 5886.14

Anticipated Bottom Hole Temperature(F): 150

Anticipated abnormal pressures, temperatures, or potential geologic hazards? NO

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

SD_EA_29_32_Fed_Com_P11_13H_H2S_06-13-2017.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

SD_EA_29_32_P11_13H_PLOT_07-12-2017.pdf

SD_EA_29_32_P11_13H_DIREC_SURV_07-12-2017.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Gas_Capture_Plan_Form_Pad_11_20170918083600.pdf

Other Variance attachment:



ContiTech

Hose Data Sheet

CRI Order No.	538332
Customer	ContiTech Oil & Marine Corp.
Customer Order No	4500412631 CBC544771, CBC544769, CBC544767, CBC544763, CBC544768, CBC544745, CBC544744, CBC544746
Item No.	1
Hose Type	Flexible Hose
Standard	API SPEC 16 C
Inside dia in inches	3
Length	45 ft
Type of coupling one end	FLANGE 4.1/16" 10KPSI API SPEC 17D SV SWIVEL FLANGE SOURC/W BX155 ST/ST INLAID R.GR.
Type of coupling other end	FLANGE 4.1/16" 10KPSI API SPEC 17D SV SWIVEL FLANGE SOURC/W BX155 ST/ST INLAID R.GR.
H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Pressure	15 000 psi
Safety Factor	2,25
Marking	USUAL PHOENIX
Cover	NOT FIRE RESISTANT
Outside protection	St. steel outer wrap
Internal stripwound tube	No
Lining	OIL + GAS RESISTANT SOUR
Safety clamp	Yes
Lifting collar	Yes
Element C	Yes
Safety chain	Yes
Safety wire rope	No
Max. design temperature [°C]	100
Min. design temperature [°C]	-20
Min. Bend Radius operating [m]	0,90
Min. Bend Radius storage [m]	0,90
Electrical continuity	The Hose is electrically continuous
Type of packing	WOODEN CRATE ISPM-15



ContiTech

CONTITECH RUBBER Industrial Kft.	No:QC-DB- 231/ 2014
	Page: 10 / 119

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°: 594			
PURCHASER: ContiTech Oil & Marine Corp.			P.O. N°: 4500412631				
CONTITECH ORDER N°: 538332		HOSE TYPE: 3" ID		Choke & Kill Hose			
HOSE SERIAL N°: 67349		NOMINAL / ACTUAL LENGTH: 13,72 m / 13,85 m					
W.P. 68,9 MPa	10000 psi	T.P. 103,4 MPa	15000 psi	Duration: 60	min.		
<p>Pressure test with water at ambient temperature</p> <p style="text-align: center;">See attachment. (1 page)</p> <p>↑ 10 mm = 10 Min. → 10 mm = 25 MPa</p>							
COUPLINGS Type		Serial N°		Quality		Heat N°	
3" coupling with 4 1/16" 10K API Swivel Flange end Hub		1435 1436		AISI 4130		A1258U	
				AISI 4130		034939	
				AISI 4130		A1045N	
Not Designed For Well Testing				API Spec 16 C			
Tag No.: 66 – 1198				Temperature rate:"B"			
All metal parts are flawless							
WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.							
STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.							
Date: 03. April 2014.		Inspector		Quality Control ContiTech Rubber Industrial Kft. Quality Control Dept. (1)			
							

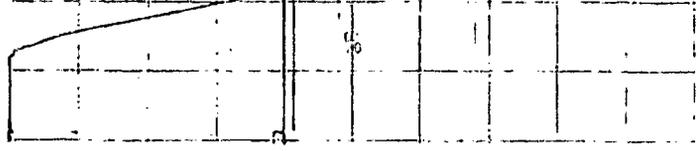
Belang Jash

**CarTech Rubber
Industrial Kit.
Quality Control Dept.
(1)**

GNr	19.82	PC	201.00							
RDr	20.70	PC	201.00							
BL	1057	bar	201.00							
GNr	19.82	PC	201.00							
RDr	20.70	PC	201.00							
BL	1058	bar	201.00							
GNr	19.82	PC	201.00							
RDr	20.70	PC	201.00							
BL	1059	bar	201.00							
GNr	19.82	PC	201.00							
RDr	20.70	PC	201.00							
BL	1060	bar	201.00							
GNr	19.82	PC	201.00							
RDr	20.70	PC	201.00							
BL	1061	bar	201.00							
GNr	19.82	PC	201.00							
RDr	20.70	PC	201.00							
BL	1062	bar	201.00							
GNr	19.82	PC	201.00							
RDr	20.70	PC	201.00							
BL	1063	bar	201.00							

002-970 28110 22139
4724 67301

50 60 70 80 90 100



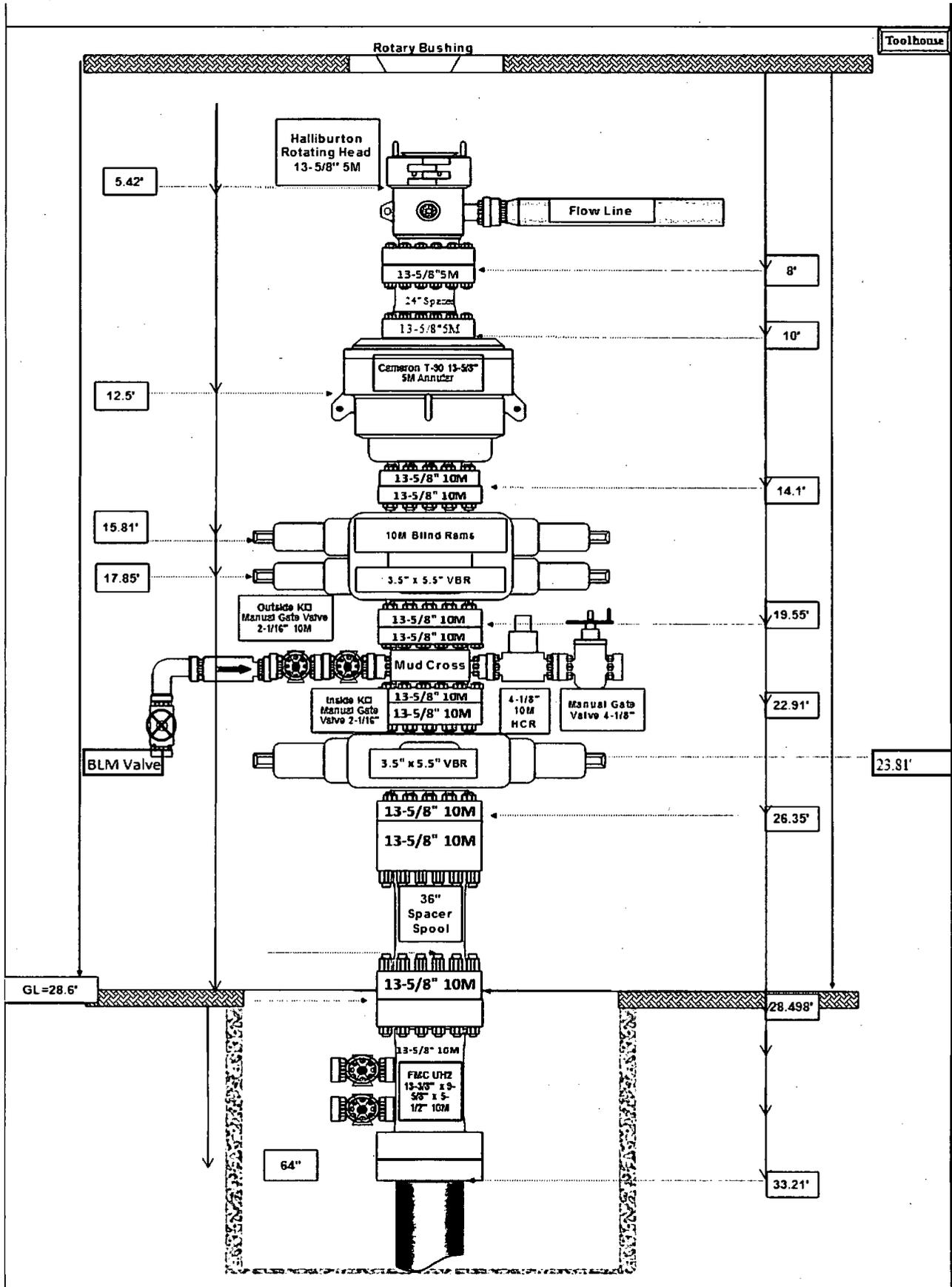


Diagram A

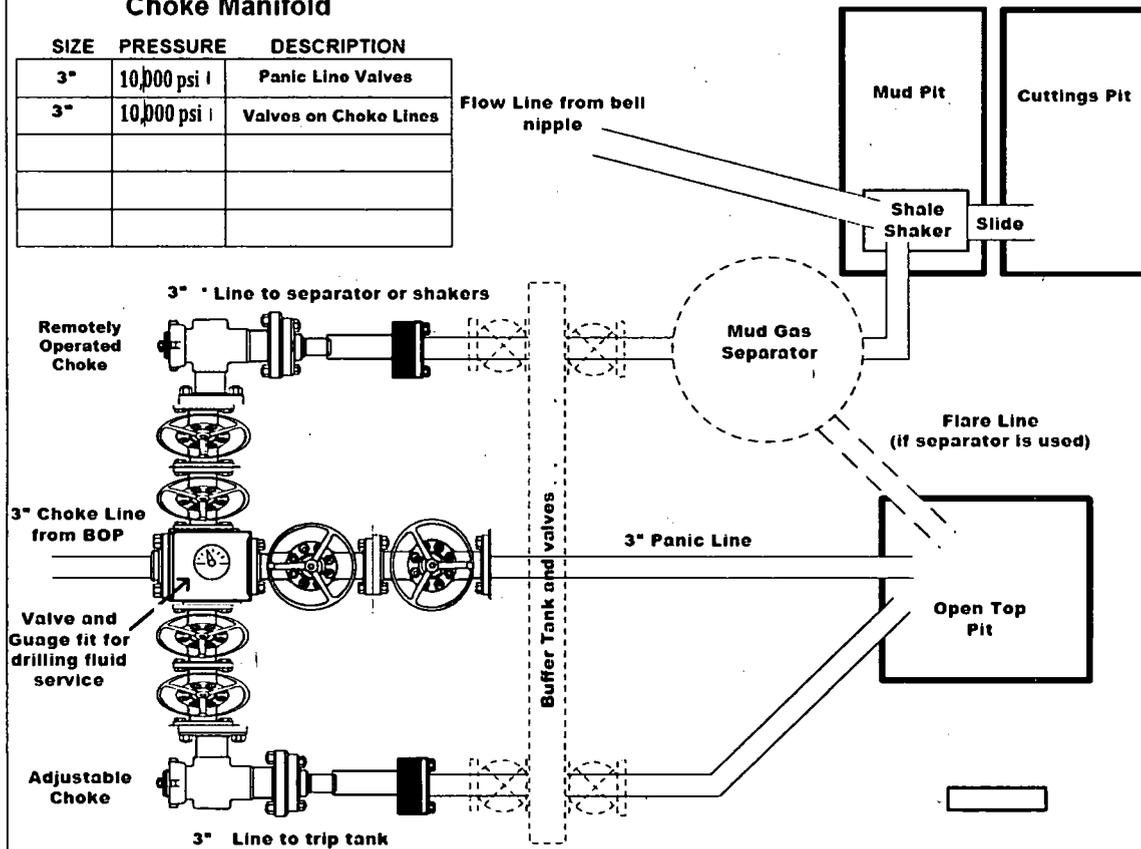
CHOKE MANIFOLD SCHEMATIC

Minimum Requirements

OPERATION : Wolfcamp A wells
Minimum System Pressure Rating : 10,000 psi

Choke Manifold

SIZE	PRESSURE	DESCRIPTION
3"	10,000 psi I	Panic Line Valves
3"	10,000 psi I	Valves on Choke Lines



Installation Checklist

The following items must be verified and checked off prior to pressure testing of BOP equipment.

- The installed BOP equipment meets at least the minimum requirements (rating, type, size, configuration) as shown on this schematic. Components may be substituted for equivalent equipment rated to higher pressures. Additional components may be put into place as long as they meet or exceed the minimum pressure rating of the system.
- Adjustable Chokes may be Remotely Operated but will have backup hand pump for hydraulic actuation in case of loss of rig air pressure or power.
- Flare and Panic lines will terminate a minimum of 150' from the wellhead. These lines will terminate at a location as per approved APD.
- The choke line, kill line, and choke manifold lines will be straight unless turns use tee blocks or are targeted with running tool, and will be anchored to prevent whip and reduce vibration. This excludes the line between mud gas separator and shale shaker.
- All valves (except chokes) on choke line, kill line, and choke manifold will be full opening and will allow straight through flow. This excludes any valves between mud gas separator and shale shakers.
- All manual valves will have hand wheels installed.
- If used, flare system will have effective method for ignition
- All connections will be flanged, welded, or clamped (no threaded connections like hammer unions)
- If buffer tank is used, a valve will be used on all lines at any entry or exit point to or from the buffer tank.

After Installation Checklist is complete, fill out the information below and email to Superintendent and Drilling Engineer

Wellname: _____

Representative: _____

Date: _____

10M BLOWOUT PREVENTER SCHEMATIC

Minimum Requirements

OPERATION: Wolfcamp Wells in Salado Draw

Minimum System Pressure Rating: 10,000 PSI

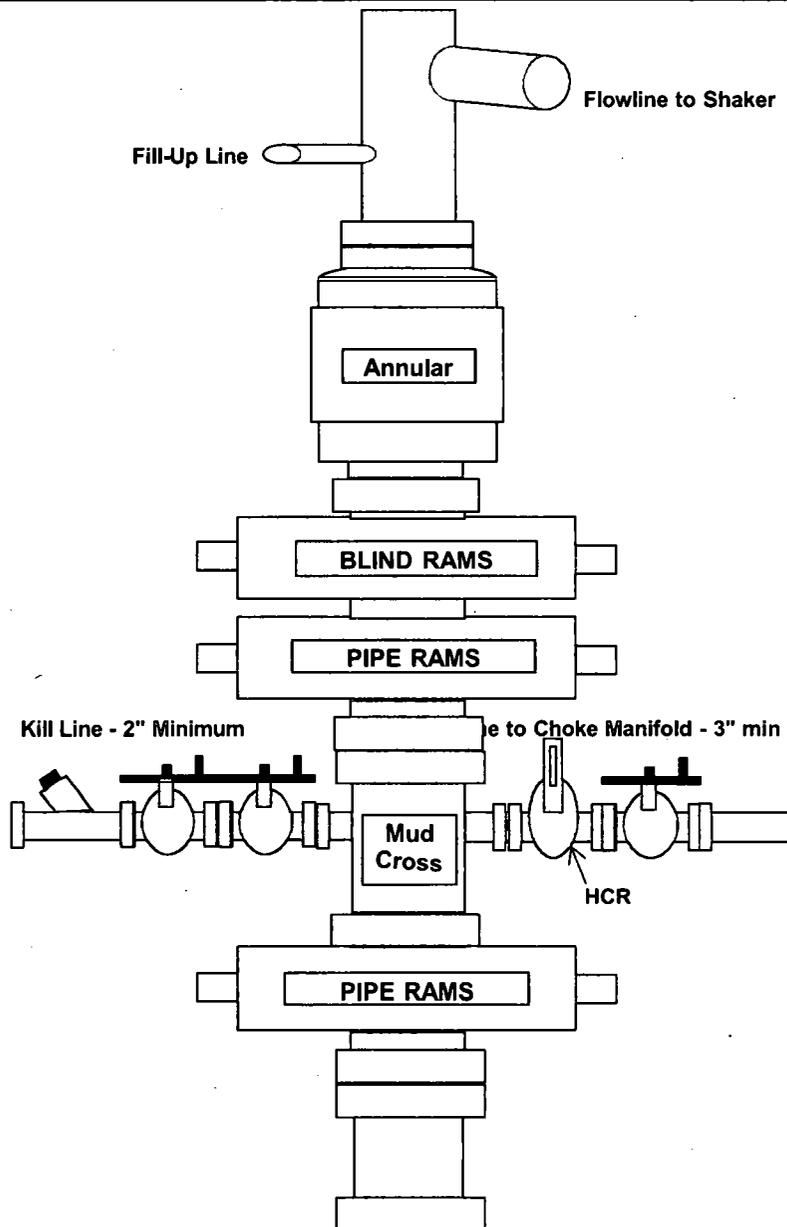


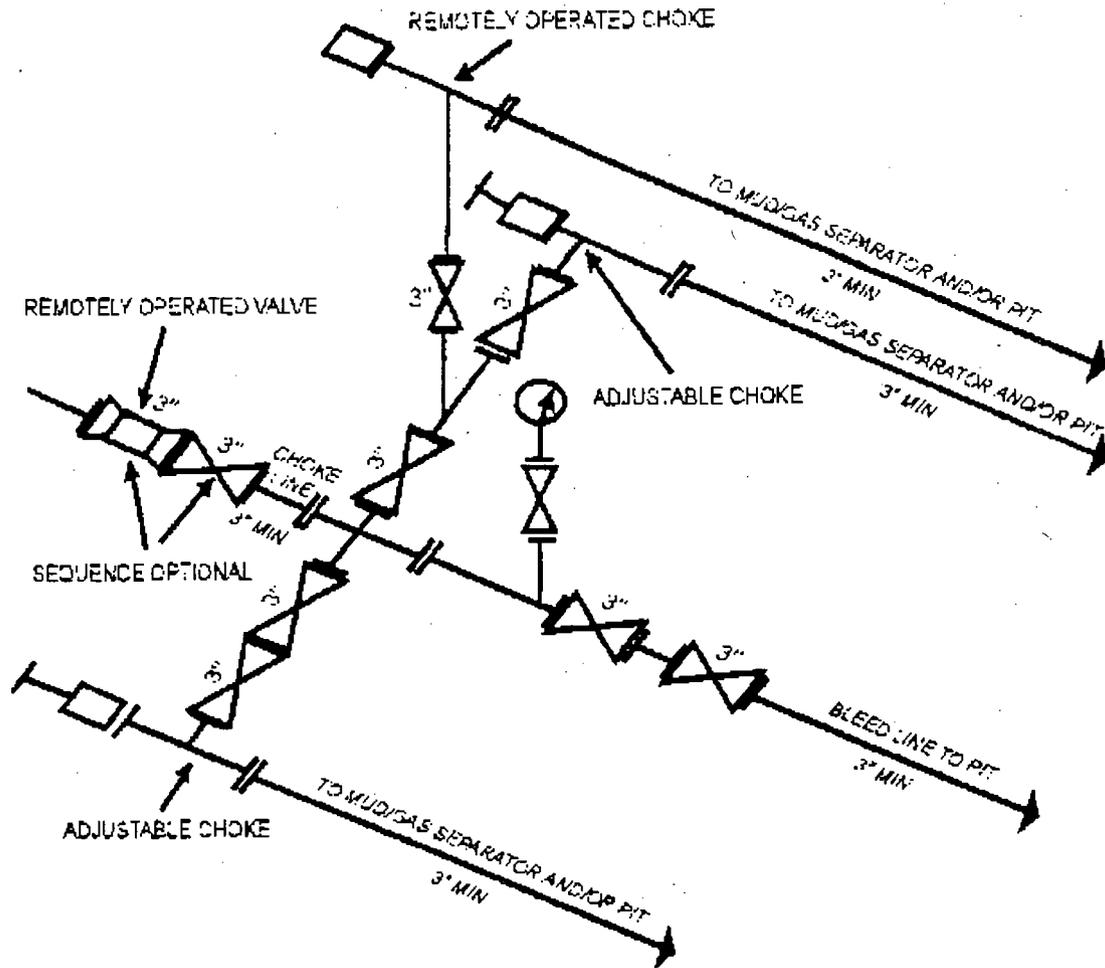
Diagram C

10M Choke Manifold SCHEMATIC

Minimum Requirements

OPERATION: Production and Open Hole Sections

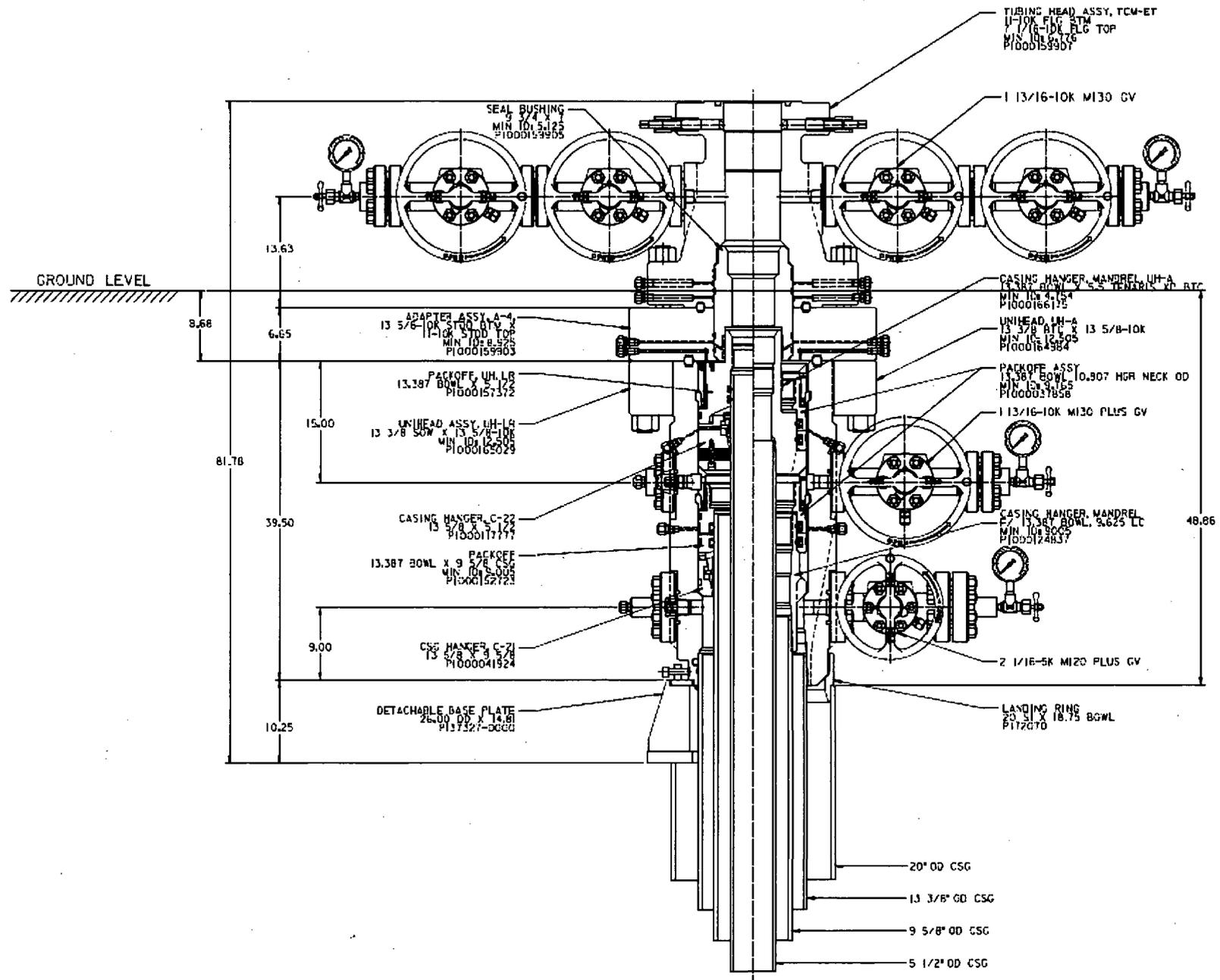
Minimum System Pressure Rating: 10,000 PSI



10M AND 15M CHOKE MANIFOLD EQUIPMENT - CONFIGURATION OF CHOKES MAY VARY

[53 FR 49661, Dec. 9, 1988 and 54 FR 39528, Sept. 27, 1989]

Diagram D



1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA TVD	KBTVD	MD
Rustler		800	
Castile		3480	
Lamar		4900	
Bell Canyon		4930	
Cherry Canyon		5970	
Brushy Canyon		7620	
Bone Spring Limestone		9090	
Upr. Avalon		9120	
Top Bone Spring 1		10040	
Top Bone Spring 2		10700	
Top Bone Spring 3		11740	
Wolfcamp		12140	
Wolfcamp A1		12193	
Lateral TD (Wolfcamp A1)		12,213	22300

2. ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
Deepest Expected Base of Fresh Water		700
Water	Rustler	800
Water	Bell Canyon	4930
Water	Cherry Canyon	5970
Oil/Gas	Brushy Canyon	7620
Oil/Gas	Bone Spring Limestone	9090
Oil/Gas	Upr. Avalon	9120
Oil/Gas	Top Bone Spring 1	10040
Oil/Gas	Top Bone Spring 2	10700
Oil/Gas	Top Bone Spring 3	11740
Oil/Gas	Wolfcamp	12140
Oil/Gas	Wolfcamp A1	12193
Oil/Gas		

All shows of fresh water and minerals will be reported and protected.

3. BOP EQUIPMENT

Will have a minimum of a 10000 psi rig stack (see proposed schematic) for drill out below surface (Wolfcamp is not exposed until drillout of the intermediate casing). Could possibly utilize the 5000 psi rig stack (see proposed schematic) for drill out below surface casing due to the availability of 10 M annular. (Wolfcamp is not exposed until drillout of the intermediate casing) Stack will be tested as specified in the attached testing requirements. Batch drilling of the surface, intermediate, and production will take place. A full BOP test will be performed unless approval from BLM is received otherwise. Flex choke hose will be used for all wells on the pad (see attached specs) BOP test will be conducted by a third party.

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4. CASING PROGRAM

a. The proposed casing program will be as follows:

Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	800'	17-1/2"	13-3/8"	55 #	J55	STC	New
Intermediate	0'	11,500'	12-1/4"	9-5/8"	43.5#	HCK-L80	LTC	New
Production	0'	22,300'	8-1/2"	5-1/2"	20.0 #	P-110-ICY	TXP BTC	New

b. Casing design subject to revision based on geologic conditions encountered.

c. *****A "Worst Case" casing design for wells in a particular area is used below to calculate the Casing Safety Factors. If for any reason the casing design for a particular well requires setting casing deeper than the following "worst case" design, then the Casing Safety Factors will be recalculated & sent to the BLM prior to drilling.**

d. **Chevron will fill casing at a minimum of every 20 jts (840') while running for intermediate and production casing in order to maintain collapse SF.**

SF Calculations based on the following "Worst Case" casing design:

Surface Casing: 850'
 Intermediate Casing: 11,200' TVD
 Production Casing: 23,000' MD/12,750' TVD (10,300' VS @ 90 deg inc)

Casing String	Min SF Burst	Min SF Collapse	Min SF Tension	Min SF Tri-Axial
Surface	1.36	3.12	3.17	1.70
Intermediate	1.12	1.44	1.93	1.37
Production	1.11	1.23	1.97	1.37

Min SF is the smallest of a group of safety factors that include the following considerations:

	Surf	Int	Prod
Burst Design			
Pressure Test- Surface, Int, Prod Csg P external: Water P internal: Test psi + next section heaviest mud in csg	X	X	X
Displace to Gas- Surf Csg P external: Water P internal: Dry Gas from Next Csg Point	X		
Frac at Shoe, Gas to Surf- Int Csg P external: Water P internal: Dry Gas, 16 ppg Frac Gradient		X	
Stimulation (Frac) Pressures- Prod Csg P external: Water P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Water P internal: Leak just below surf, 8.7 ppg packer fluid			X
Collapse Design			
Full Evacuation P external: Water gradient in cement, mud above TOC P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: water	X	X	X
Tension Design			
100k lb overpull	X	X	X

5. **CEMENTING PROGRAM**

Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks	Water
Surface				(ppg)	(sx/cu ft)	Open Hole		gal/sk
Tail	Class C	0'	800'	14.8	1.33	50	650	6.57
Intermediate								
Stage 2 Lead	Class C	0'	4570	11.9	2.39	100	1070	13.46
Stage 2 Tail	Class C	4570	4870	14.8	1.33	25	89	6.35
Stage 1 Lead	50:50 Poz Class C	4,870'	10,650'	11.9	2.21	25	1024	12.18
Stage 1 Tail	Class H	10,650'	11,150'	15.6	1.22	25	184	5.37
Production								
Tail	Acid Soluble	10,350'	22,300'	15.6	1.2	10	2500	5.05

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. Production casing will have one horizontal type centralizer on every joint for the first 1000' from TD, then every other joint to EOB, and then every third joint to KOP. Bowspring type centralizers will be run from KOP to intermediate casing.

6. MUD PROGRAM

From	To	Type	Weight	F. Vis	Filtrate
0'	800'	Spud Mud	8.3 - 8.7	32 - 34	NC - NC
800'	11,150'	Oil Based Mud	8.7-9.2	28 - 30	25-30
11,150'	12,300'	Oil Based Mud	9.5-13.5	70 - 75	25 - 30
12,300'	22,300'	Oil Based Mud	9.5-13.5	70 - 75	25 - 30

A closed system will be utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-toilet and then hauled to an approved sanitary landfill.

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

7. TESTING, LOGGING, AND CORING

The anticipated type and amount of testing, logging, and coring are as follows:

- a. Drill stem tests are not planned.
- b. The logging program will be as follows:

TYPE	Logs	Interval	Timing	Vendor
Mudlogs	2 man mudlog	Int Csg to TD	Drillout of Int Csg	TBD
LWD	MWD Gamma	Int. and Prod. Hole	While Drilling	TBD

- c. Conventional whole core samples are not planned.
- d. A Directional Survey will be run.

8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

- a. No abnormal pressures or temperatures are expected. Estimated BHP at intermediate TD is: 5750 psi
 No abnormal pressures or temperatures are expected. Estimated BHP at production TD is: 8650 psi
- b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered

1. FORMATION TOPS

The estimated tops of important geologic markers are as follows:

FORMATION	SUB-SEA TVD	KBTVD	MD
Rustler		800	
Castile		3480	
Lamar		4900	
Bell Canyon		4930	
Cherry Canyon		5970	
Brushy Canyon		7620	
Bone Spring Limestone		9090	
Upr. Avalon		9120	
Top Bone Spring 1		10040	
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Wolfcamp		12140	
Wolfcamp A1		12193	
Lateral TD (Wolfcamp A1)		12,213	22300

2. ESTIMATED DEPTH OF WATER, OIL, GAS & OTHER MINERAL BEARING FORMATIONS

The estimated depths at which the top and bottom of the anticipated water, oil, gas, or other mineral bearing formations are expected to be encountered are as follows:

Substance	Formation	Depth
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Oil/Gas	Top Bone Spring 1	10040
Oil/Gas	Top Bone Spring 2	10700
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Oil/Gas	Wolfcamp	12140
Oil/Gas	Wolfcamp A1	12193
Oil/Gas		

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Purpose	From	To	Hole Size	Csg Size	Weight	Grade	Thread	Condition
Surface	0'	800'	17-1/2"	13-3/8"	55 #	J55	STC	New
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b. Casing design subject to revision based on geologic conditions encountered.

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Displace to Gas- Surf Csg P external: Water P internal: Dry Gas from Next Csg Point	X		
Frac at Shoe, Gas to Surf- Int Csg P external: Water P internal: Dry Gas, 16 ppg Frac Gradient		X	
Stimulation (Frac) Pressures- Prod Csg P external: Water P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Water P internal: Leak just below surf, 8.7 ppg packer fluid			X
Collapse Design			
Full Evacuation P external: Water gradient in cement, mud above TOC P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: water	X	X	X
Tension Design			
100k lb overpull	X	X	X

5. CEMENTING PROGRAM

Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks	Water
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Tail	Class C	0'	800'	14.8	1.33	50	650	6.57
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Casing and Tubing Performance Data

PIPE BODY DATA

GEOMETRY

Outside Diameter	9.625 in	Wall Thickness	0.435 in	API Drift Diameter	8.599 in
Nominal Weight	43.50 lbs/ft	Nominal ID	8.755 in	Alternative Drift Diameter	8.625 in
Plain End Weight	42.73 lbs/ft	Nominal cross section	12.559 in		

PERFORMANCE

Steel Grade	L80	Minimum Yield	80,000 psi	Minimum Ultimate	95,000 psi
Tension Yield	1,005,000 in	Internal Pressure Yield	6,330 psi	Collapse Pressure	3,810 psi
Available Seamless	Yes	Available Welded	No		

CONNECTION DATA

TYPE: LTC

GEOMETRY

Coupling Reg OD	10.625 in	Threads per in	8	Thread turns make up	3.5
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PERFORMANCE

Steel Grade	L80	Coupling Min Yield	80,000 psi	Coupling Min Ultimate	95,000 psi
Joint Strength	813,000 lbs			Internal Pressure Resistance	6,330 psi

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Production	0'	22,300'	8-1/2"	5-1/2"	20.0 #	P-110-ICY	TXP BTC	New

b. Casing design subject to revision based on geologic conditions encountered.

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Displace to Gas- Surf Csg P external: Water P internal: Dry Gas from Next Csg Point	X		
Frac at Shoe, Gas to Surf- Int Csg P external: Water P internal: Dry Gas, 16 ppg Frac Gradient		X	
Stimulation (Frac) Pressures- Prod Csg P external: Water P internal: Max inj pressure w/ heaviest injected fluid			X
Tubing leak- Prod Csg (packer at KOP) P external: Water P internal: Leak just below surf, 8.7 ppg packer fluid			X
Collapse Design			
Full Evacuation P external: Water gradient in cement, mud above TOC P internal: none	X	X	X
Cementing- Surf, Int, Prod Csg P external: Wet cement P internal: water	X	X	X
Tension Design			
100k lb overpull	X	X	X

5. **CEMENTING PROGRAM**

Slurry	Type	Top	Bottom	Weight	Yield	%Excess	Sacks	Water
Surface				(ppg)	(sx/cu ft)	Open Hole		gal/sk
Tail	Class C	0'	800'	14.8	1.33	50	650	6.57
Intermediate								
Stage 2 Lead	Class C	0'	4570	11.9	2.39	100	1070	13.46
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Stage 1 Tail	Class H	10,650'	11,150'	15.6	1.22	25	184	5.37
Production								
Tail	Acid Soluble	10,350'	22,300'	15.6	1.2	10	2500	5.05

1. Final cement volumes will be determined by caliper.
2. Surface casing shall have at least one centralizer installed on each of the bottom three joints starting with the shoe joint.
3. Production casing will have one horizontal type centralizer on every joint for the first 1000' from TD, then every other joint to EOB, and then every third joint to KOP. Bowspring type centralizers will be run from KOP to intermediate casing.

6. MUD PROGRAM

From	To	Type	Weight	F. Vis	Filtrate
0'	800'	Spud Mud	8.3 - 8.7	32 - 34	NC - NC
800'	11,150'	Oil Based Mud	8.7-9.2	28 - 30	25-30
11,150'	12,300'	Oil Based Mud	9.5-13.5	70 - 75	25 - 30
12,300'	22,300'	Oil Based Mud	9.5-13.5	70 - 75	25 - 30

A closed system will be utilized consisting of above ground steel tanks. All wastes accumulated during drilling operations will be contained in a portable trash cage and removed from location and deposited in an approved sanitary landfill. Sanitary wastes will be contained in a chemical porta-toilet and then hauled to an approved sanitary landfill.

All fluids and cuttings will be disposed of in accordance with New Mexico Oil Conservation Division rules and regulations.

A mud test shall be performed every 24 hours after mudding up to determine, as applicable: density, viscosity, gel strength, filtration, and pH.

Visual mud monitoring equipment shall be in place to detect volume changes indicating loss or gain of circulating fluid volume. When abnormal pressures are anticipated -- a pit volume totalizer (PVT), stroke counter, and flow sensor will be used to detect volume changes indicating loss or gain of circulating fluid volume.

A weighting agent and lost circulating material (LCM) will be onsite to mitigate pressure or lost circulation as hole conditions dictate.

7. TESTING, LOGGING, AND CORING

The anticipated type and amount of testing, logging, and coring are as follows:

- a. Drill stem tests are not planned.
- b. The logging program will be as follows:

TYPE	Logs	Interval	Timing	Vendor
Mudlogs	2 man' mudlog	Int Csg to TD	Drillout of Int Csg	TBD
LWD	MWD Gamma	Int. and Prod. Hole	While Drilling	TBD

- c. Conventional whole core samples are not planned.
- d. A Directional Survey will be run.

8. ABNORMAL PRESSURES AND HYDROGEN SULFIDE

- a. No abnormal pressures or temperatures are expected. Estimated BHP at intermediate TD is: 5750 psi
 No abnormal pressures or temperatures are expected. Estimated BHP at production TD is: 8650 psi
- b. Hydrogen sulfide gas is not anticipated. An H2S Contingency plan is attached with this APD in the event that H2S is encountered

For the latest performance data, always visit our website: www.tenaris.com

January 18 2016



Connection: TenarisXP® BTC
Casing/Tubing: CAS
Coupling Option: REGULAR

Size: 5.500 in.
Wall: 0.361 in.
Weight: 20.00 lbs/ft
Grade: P110-ICY
Min. Wall Thickness: 87.5 %

PIPE BODY DATA			
GEOMETRY			
Nominal OD	5.500 in.	Nominal Weight	20.00 lbs/ft
Nominal ID	4.778 in.	Wall Thickness	0.361 in.
Plain End Weight	19.83 lbs/ft	Standard Drift Diameter	4.653 in.
		Special Drift Diameter	N/A
PERFORMANCE			
Body Yield Strength	729 x 1000 lbs	Internal Yield	14360 psi
Collapse	12100 psi	SMYS	125000 psi
TENARISXP® BTC CONNECTION DATA			
GEOMETRY			
Connection OD	6.100 in.	Coupling Length	9.450 in.
Critical Section Area	5.828 sq. in.	Threads per in.	5.00
		Connection ID	4.766 in.
		Make-Up Loss	4.204 in.
PERFORMANCE			
Tension Efficiency	100 %	Joint Yield Strength	729 x 1000 lbs
Structural Compression Efficiency	100 %	Structural Compression Strength	729 x 1000 lbs
External Pressure Capacity	12100 psi	Internal Pressure Capacity ⁽¹⁾	14360 psi
		Structural Bending ⁽²⁾	104 °/100 ft
ESTIMATED MAKE-UP TORQUES ⁽³⁾			
Minimum	11540 ft-lbs	Optimum	12820 ft-lbs
		Maximum	14100 ft-lbs
OPERATIONAL LIMIT TORQUES			
Operating Torque	22700 ft-lbs	Yield Torque	25250 ft-lbs
BLANKING DIMENSIONS			
<u>Blanking Dimensions</u>			

(1) Internal Pressure Capacity related to structural resistance only. Internal pressure leak resistance as per section 10.3 API 5C3 / ISO 10400 - 2007.

(2) Structural rating, pure bending to yield (i.e no other loads applied)

(3) Torque values calculated for API Modified thread compounds with Friction Factor=1. For other thread compounds please contact us at licensees@oilfield.tenaris.com. Torque values may be further reviewed. For additional information, please contact us at contact-tenarishydril@tenaris.com



H₂S Preparedness and Contingency Plan Summary

SD EA 29 32 Fed Com P11 13H

SD EA 29 32 Fed Com P11 14H

SD EA 29 32 Fed Com P11 15H

SD EA 29 32 Fed Com P11 16H

Training

MCBU Drilling and Completions H₂S training requirements are intended to define the minimum level of training required for employees, contractors and visitors to enter or perform work at MCBU Drilling and Completions locations that have known concentrations of H₂S.

Awareness Level

Employees and visitors to MCBU Drilling and Completions locations that have known concentrations of H₂S, who are not required to perform work in H₂S areas, will be provided with an awareness level of H₂S training prior to entering any H₂S areas. At a minimum, awareness level training will include:

1. Physical and chemical properties of H₂S
2. Health hazards of H₂S
3. Personal protective equipment
4. Information regarding potential sources of H₂S
5. Alarms and emergency evacuation procedures

Awareness level training will be developed and conducted by personnel who are qualified either by specific training, educational experience and/or work-related background.

Advanced Level H₂S Training

Employees and contractors required to work in areas that may contain H₂S will be provided with Advanced Level H₂S training prior to initial assignment. In addition to the Awareness Level requirements, Advanced Level H₂S training will include:

1. H₂S safe work practice procedures;
2. Emergency contingency plan procedures;
3. Methods to detect the presence or release of H₂S (e.g., alarms, monitoring equipment), including hands-on training with direct reading and personal monitoring H₂S equipment.
4. Basic overview of respiratory protective equipment suitable for use in H₂S environments. Note: Employees who work at sites that participate in the Chevron Respirator User program will require separate respirator training as required by the MCBU Respiratory Protection Program;
5. Basic overview of emergency rescue techniques, first aid, CPR and medical evaluation procedures. Employees who may be required to perform "standby" duties are required to receive additional first aid and CPR training, which is not covered in the Advanced Level H₂S training;
6. Proficiency examination covering all course material.

Advanced H₂S training courses will be instructed by personnel who have successfully completed an appropriate H₂S train-the-trainer development course (ANSI/ASSE Z390.1-2006) or who possess significant past experience through educational or work-related background.



APD ID: 10400015075

Submission Date: 07/12/2017

Highlighted data
reflects the most
recent changes

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

SD_EA_29_32_Fed_Com_P11_13H_Road_06-13-2017.pdf

Existing Road Purpose: FLUID TRANSPORT

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 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

SD_EA_29_32_Fed_Com_P11_13H_Road_06-13-2017.pdf

Existing Road Purpose: FLUID TRANSPORT

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:

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

SD_EA_29_32_Fed_Com_P11_13H_Well_Plat_20170918145014.pdf

New road type: LOCAL

Length: 34.37 **Feet** **Width (ft.):** 25

Max slope (%): 2 **Max grade (%):** 3

Army Corp of Engineers (ACOE) permit required? NO

ACOE Permit Number(s):

New road travel width: 25

New road access erosion control: Erosion / Drainage: Drainage control system shall be constructed on the entire length of road by the use of any of the following: ditches, side hill out-sloping and in-sloping, lead-off ditches, culvert installation, or low water crossings.

New road access plan or profile prepared? NO

New road access plan attachment:

Access road engineering design? NO

Access road engineering design attachment:

Access surfacing type: NONE

Access topsoil source: ONSITE

Access surfacing type description:

Access onsite topsoil source depth: 0

Offsite topsoil source description:

Onsite topsoil removal process: none needed

Access other construction information: Enclosure fencing will be installed around open cellar to prevent livestock or large wildlife from being trapped after installation. Fencing will remain in place while no activity is present and until back-filling takes place.

Access miscellaneous information: No surface water concerns, Low Karst area with no caves or visual signs of caves found, the entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad, no known water wells within the 1-mile radius, no dwellings within the immediate vicinity of the proposed location, well signs will be in compliance per federal and state requirements and specifications.

Number of access turnouts: 60 **Access turnout map:**

Drainage Control

New road drainage crossing: CULVERT

Drainage Control comments: Sediment traps (hay bales suggested by BLM) we don't use every time but keep handy.

Road Drainage Control Structures (DCS) description: ditching will be constructed on both sides of road.

Road Drainage Control Structures (DCS) attachment:

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

Access Additional Attachments

Additional Attachment(s):

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

SD_EA_29_32_Fed_Com_P11_13H__1_MILE_RADIUS_06-14-2017.pdf

Existing Wells description:

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

Submit or defer a Proposed Production Facilities plan? SUBMIT

Production Facilities description:

Production Facilities map:

SD_EA_29_32_Fed_Com_P11_13H_Detail_07-12-2017.pdf

SD_EA_29_32_Fed_Com_P11_13H_16H_PrelimFlowlines_20170918083801.pdf

SD_EA_29_32_Fed_Com_P11_13H_16H_PrelimGas_Lift_Lines_20170918083842.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

Water source use type: INTERMEDIATE/PRODUCTION CASING,
SURFACE CASING

Water source type: GW WELL

Describe type:

Source latitude:

Source longitude:

Source datum: NAD83

Water source permit type: OTHER,PRIVATE CONTRACT

Source land ownership: FEDERAL

Water source transport method: PIPELINE

Source transportation land ownership: FEDERAL

Water source volume (barrels): 725000

Source volume (acre-feet): 93.447495

Source volume (gal): 30450000

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

Water source use type: INTERMEDIATE/PRODUCTION CASING,
SURFACE CASING

Water source type: GW WELL

Describe type:

Source latitude:

Source longitude:

Source datum:

Water source permit type:

Source land ownership:

Water source transport method:

Source transportation land ownership:

Water source volume (barrels): 700000

Source volume (acre-feet): 90.22517

Source volume (gal): 29400000

Water source and transportation map:

SD_EA_29_32_Fed_Com_P11_13H_Detail_06-14-2017.pdf

Water source comments: Existing ponds in Section 19, T26S-R33E will be utilized for fresh water and Section 23 T26S-R32 and Section 13 T26S-R32 for recycled water. Fresh water will be obtained from a private water source. A temporary 10" expanding pipe transfer line will run west from frac pond in Section 19 and will run north along proposed access road approx. 8,403.34'. to the well location in section 18. o A fresh water line will run parallel to road and will stay within 10' of access road. o A BLM ROW will not be required for the water transfer line. A temporary 10" expanding pipe transfer line will run east along lease road along lease road approx. 6,050.77' from frac ponds located in Sections 13 & 23 to the well location in Section 18. o Recycled water line will run parallel to road and will stay within 10' of access road. o A BLM ROW will not be required for the water transfer line.

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:

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

Additional information attachment:

Section 6 - Construction Materials

Construction Materials description: Caliche will be used to construct well pad and roads. Material will be purchased from the private land owners (Oliver Kiehne) caliche pit located in Sec. 27, T26S, R33E, Lea County, NM, AND ALTERNATIVE @ N2 Sec 21, T26S, R33E, Lea County, NM. The proposed source of construction material will be located and purchased by Chevron USA Inc. Notification shall be given to BLM at 575-234-5909 at least 3 working days prior to commencing construction of access road and/or well pad.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: GARBAGE

Waste content description: Garbage and trash

Amount of waste: 200 barrels

Waste disposal frequency : Daily

Safe containment description: collected in a trash container properly contained and disposed of properly disposed of into steel tanks

Safe containmant attachment:

Waste disposal type: HAUL TO COMMERCIAL FACILITY **Disposal location ownership:** STATE

Disposal type description:

Disposal location description: NMOCD approved disposal 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? NO

Description of cuttings location

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

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:

SD_EA_29_32_Fed_Com_P11_13H_Rig_Layout_06-13-2017.pdf

SD_EA_29_32_Fed_Com_P11_13H_Well_Plat_06-13-2017.pdf

Comments: Exterior well pad dimensions are 380' x 495'. o Interior well pad dimensions from point of entry (well head) of the easternmost well are N-120', S-260', E-285', W-210'. The length to the west includes 25' spacing for next well on multi-well pad (four wells). Total disturbance area needed for construction of well pad will be 4.32 acres. o Topsoil placement is on the east where interim reclamation is planned to be completed upon completion of well and evaluation of best management practices. Cut and fill: will be minimal.

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: SD EA 29 32 FED COM P11

Multiple Well Pad Number: 13 14 15 16

Recontouring attachment:

SD_EA_29_32_Fed_Com_P11_13H_16H_IRPlat_06-13-2017.pdf

SD_EA_29_32_Fed_Com_P11_13H_APD_SUP_06-13-2017.pdf

SD_EA_29_32_Fed_Com_P11_13H_Cut_Fill_06-14-2017.pdf

Drainage/Erosion control construction: Proper erosion control methods will be used on the area to control erosion, runoff, and siltation of the surrounding area.

Drainage/Erosion control reclamation: please refer to the attached APD SUP

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

Wellpad long term disturbance (acres): 4.32

Wellpad short term disturbance (acres): 2.5

Access road long term disturbance (acres): 3.68

Access road short term disturbance (acres): 0

Pipeline long term disturbance (acres): 0.0059641874

Pipeline short term disturbance (acres): 0

Other long term disturbance (acres): 0

Other short term disturbance (acres): 0

Total long term disturbance: 8.005964

Total short term disturbance: 2.5

Reconstruction method: refer to the APD SUP attached.

Topsoil redistribution: Topsoil will be evenly re-spread and aggressively revegetated over the entire disturbed area not needed for all-weather operations including cuts & fills. To seed the area, the proper BLM seed mixture (BLM #2), free of noxious weeds, will be used.

Soil treatment: After all the disturbed areas have been properly prepared the areas will be seeded with the proper BLM seed mixture, free of noxious weeds.

Existing Vegetation at the well pad: mesquite, shrubs, grass

Existing Vegetation at the well pad attachment:

Existing Vegetation Community at the road: mesquite, shrubs, grass

Existing Vegetation Community at the road attachment:

Existing Vegetation Community at the pipeline: mesquite, shrubs, grass

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:

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

Section 11 - Surface Ownership

Disturbance type: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

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:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Disturbance type: EXISTING ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

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:

Other Local Office:

USFS Region:

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

USFS Forest/Grassland:

USFS Ranger District:

Disturbance type: WELL PAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

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:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Disturbance type: PIPELINE

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

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:

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P11

Well Number: 13H

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Section 12 - Other Information

Right of Way needed? NO

Use APD as ROW?

ROW Type(s):

ROW Applications

SUPO Additional Information: Erosion / Drainage: Drainage control system shall be constructed on the entire length of road by use of any of the following: ditches, side hill out-sloping and in-sloping, lead-off ditches, culvert installation, or low water crossings. Enclosure fencing will be installed around open cellar to prevent livestock or large wildlife from being trapped after installation. Fencing will remain in place while no activity is present and until backfilling takes place. Terrain: Landscape is flat Soil: Sandy loam Vegetation: Vegetation present in surrounding area includes mesquite, shrubs, and grass (needle-grass, burro grass, dropseed). Wildlife: No wildlife observed, but it is likely that deer, rabbits, coyotes, and rodents pass through the area. Surface Water: No surface water concerns. Cave Karst: Low Karst area with no caves or visual signs of caves found. Watershed Protection: The entire perimeter of the well pad will be bermed to prevent oil, salt, and other chemical contaminants from leaving the well pad. Water wells: No known water wells within the 1- mile radius. Residences and Buildings: No dwellings within the immediate vicinity of the proposed location. Well Signs: Well signs will be in compliance per federal and state requirements and specifications.

Use a previously conducted onsite? YES

Previous Onsite information: On-site performed by BLM NRS: Paul Murphy 04/26/2017.

Other SUPO Attachment



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:

Describe 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:

Describe 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:

Assigned injection well API number?

Injection well new surface disturbance (acres):

Minerals protection information:

Mineral protection attachment:

Underground Injection Control (UIC) Permit?

UIC Permit attachment:

Injection well name:

Injection well API number:

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:



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

Bond Info Data Report

12/21/2017

Bond Information

Federal/Indian APD: FED

BLM Bond number: CA0329

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:



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

Operator Certification Data Report

12/21/2017

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: Denise Pinkerton

Signed on: 06/13/2017

Title: Regulatory Specialist

Street Address: 6301 Deauville Blvd

City: Midland

State: TX

Zip: 79706

Phone: (432)687-7375

Email address: leakejd@chevron.com

Field Representative

Representative Name:

Street Address:

City:

State:

Zip:

Phone:

Email address: