

HOBBS OCD

FEB 14 2018

Form 3160-3
(March 2012)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

RECEIVED

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

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. NMNM27506
1b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name
2. Name of Operator CHEVRON USA INCORPORATED (4323)		7. If Unit or CA Agreement, Name and No.
3a. Address 6301 Deauville Blvd. Midland TX 79706		8. Lease Name and Well No. (320787) SD EA 29 32 FED COM P10 17H
3b. Phone No. (include area code) (432)687-7866		9. API Well No. 30-025 44485
4. Location of Well (Report location clearly and in accordance with any State requirements.) At surface NWNW / 120 FNL / 2605 FWL / LAT 32.021432 / LONG -103.594402 At proposed prod. zone SWSW / 180 FSL / 2010 FWL / LAT 32.000737 / LONG -103.596287		10. Field and Pool, or Exploratory (98097) WC025G09S263327G / UPPER WOLFC
14. Distance in miles and direction from nearest town or post office* 33 miles		11. Sec., T. R. M. or Blk. and Survey or Area SEC 29 / T26S / R33E / NMP
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 120 feet	16. No. of acres in lease 1517.74	17. Spacing Unit dedicated to this well 237.37
18. Distance from proposed location* to nearest well, drilling, completed, 25 feet applied for, on this lease, ft.	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.) 3235 feet	22. Approximate date work will start* 01/01/2018	23. Estimated duration 120 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 07/11/2017
Title Regulatory Specialist		
Approved by (Signature) (Electronic Submission)	Name (Printed/Typed) Cody Layton / Ph: (575)234-5959	Date 02/08/2018
Title Supervisor Multiple Resources		

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: 02/08/2018

KZ
02/14/18

Double sided

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.



Application for Permit to Drill

OCD Hobbs

U.S. Department of the Interior
Bureau of Land Management

APD Package Report

Date Printed: 02/09/2018 10:23 AM

APD ID: 10400015937

Well Status: AAPD

APD Received Date: 07/11/2017 09:00 AM

Well Name: SD EA 29 32 FED COMP10

Operator: CHEVRON USA INCORPORATED

Well Number: 18H

APD Package Report Contents

- Form 3160-3
- Operator Certification Report
- Application Report
- Application Attachments
 - Well Plat: 2 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
 - Blowout Prevention Choke Diagram Attachment: 2 file(s)
 - Blowout Prevention BOP Diagram Attachment: 2 file(s)
 - Casing Taperd String Specs: 3 file(s)
 - Casing Design Assumptions and Worksheet(s): 8 file(s)
 - Hydrogen sulfide drilling operations plan: 1 file(s)
 - Proposed horizontal/directional/multi-lateral plan submission: 2 file(s)
 - Other Facets: 1 file(s)
- SUPO Report
- SUPO Attachments
 - Existing Road Map: 1 file(s)
 - Attach Well map: 1 file(s)
 - Production Facilities map: 3 file(s)
 - Water source and transportation map: 1 file(s)
 - Well Site Layout Diagram: 2 file(s)
 - Recontouring attachment: 2 file(s)
 - Other SUPO Attachment: 1 file(s)
- PWD Report
- PWD Attachments
 - None
- Bond Report

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- Bond Attachments

-- None

(17) 10/10/00

10/10/00

(17) 10/10/00



OCD Hobbs

U.S. Department of the Interior
Bureau of Land Management

Application for Permit to Drill

APD Package Report

30-025-44485

Date Printed: 02/09/2018 09:07 AM

APD ID: 10400015778

Well Status: AAPD

APD Received Date: 07/11/2017 07:46 AM

Well Name: SD EA 29 32 FED COM P10

Operator: CHEVRON USA INCORPORATED

Well Number: 17H

320787

(4323)

APD Package Report Contents

78097

- Form 3160-3
- Operator Certification Report
- Application Report
- Application Attachments
 - Well Plat: 2 file(s)
- Drilling Plan Report
- Drilling Plan Attachments
 - Blowout Prevention Choke Diagram Attachment: 3 file(s)
 - Blowout Prevention BOP Diagram Attachment: 1 file(s)
 - Casing Design Assumptions and Worksheet(s): 5 file(s)
 - Hydrogen sulfide drilling operations plan: 1 file(s)
 - Proposed horizontal/directional/multi-lateral plan submission: 2 file(s)
 - Other Facets: 1 file(s)
- SUPO Report
- SUPO Attachments
 - Existing Road Map: 1 file(s)
 - Attach Well map: 1 file(s)
 - Production Facilities map: 3 file(s)
 - Water source and transportation map: 1 file(s)
 - Well Site Layout Diagram: 2 file(s)
 - Recontouring attachment: 2 file(s)
 - Other SUPO Attachment: 1 file(s)
- PWD Report
- PWD Attachments
 - None
- Bond Report
- Bond Attachments

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-- None



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

Drilling Plan Data Report

02/09/2018

APD ID: 10400015778

Submission Date: 07/11/2017

Highlighted data
reflects the most
recent changes

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

[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	3235	800	800	ANHYDRITE	NONE	No
2	CASTILE	-245	3480	3480	DOLOMITE	NONE	No
3	LAMAR	-1665	4900	4900	LIMESTONE	NONE	No
4	BELL CANYON	-1695	4930	4930	SANDSTONE	NONE	No
5	CHERRY CANYON	-2735	5970	5970	SANDSTONE	NONE	No
6	BRUSHY CANYON	-4385	7620	7620	SANDSTONE	NONE	No
7	BONE SPRING LIME	-5855	9090	9090	LIMESTONE	NONE	No
8	UPPER AVALON SHALE	-5885	9120	9120	SHALE	NONE	No
9	BONE SPRING 1ST	-6805	10040	10040	LIMESTONE	NONE	No
10	BONE SPRING 2ND	-7465	10700	10700	LIMESTONE	NONE	No
11	BONE SPRING 3RD	-8505	11740	11740	LIMESTONE	NONE	No
12	WOLFCAMP	-8905	12140	23000	SHALE	OIL	Yes

Section 2 - Blowout Prevention

Pressure Rating (PSI): 10M

Rating Depth: 12213

Equipment: MINIMUM OF 10000 PSI RIG STACK (SEE PROPOSED SCHEMATIC FOR DRILL OUT BELOW SURFACE CASING) WOLFCAMP IS NOT EXPOSED UNTIL DRILLOUT OF THE INTER CSG. BATCH DRILLING OF THE SURF, INTER, AND PRODUCTION WILL TAKE PLACE. A FULL BOP TEST WILL BE PERFORMED UNLESS APPROVAL FROM BLM IS RECVD OTHERWISE. FLEX CHOKE HOSE WILL BE USED FOR ALL WELLS ON THE PAD. (SEE ATTACHED SPECS) BOP TEST WILL BE CONDUCTED BY A 3RD PARTY.

Requesting Variance? YES

Variance request: FMC UH2 MULTIBOWL WELLHEAD, WHICH WILL BE RUN THROUGH THE RIG FLOOR ON SURFACE CASING. BOPE WILL BE NIPPLED UP AND TESTED AFTER CEMENTING SURF CSG. SUBSEQUENT

Operator Name: CHEVRON USA INCORPORATED.

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

TESTS WILL BE PERFORMED AS NEEDED, NOT TO EXCEED 30 DAYS. THE FIELD REPORT FROM FMC AND 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. ALSO REQUEST VARIANCE FOR FLEX CHOKE HOSE TO BE USED FOR ALL WELLS ON THE PAD. (SEE ATTACHED SPEC)

Testing Procedure: BEFORE DRILLING OUT OF THE SURF CSG, THE RAM-TYPE BOP AND ACCESSORY EQPT WILL BE TESTED TO 5000/250 PSIG AND THE ANNULAR PREVENTER TO 5000/250 PSIG. THE SURF CSG WILL BE TESTED TO 1500 PSI FOR 30 MINS. BEFORE DRILLING OUT OF THE INTER CSG, THE RAM-TYPE BOP AND ACCESSORY EQPT WILL BE TESTED TO 5000/250 PSIG AND THE ANNULAR PREVENTER TO 5000/250 PSIG. THE INTER CSG WILL BE TESTED TO 2000 PSI FOR 30 MINS. IF THE SYSTEM IS UPGRADED ALL THE COMPONENTS INSTALLED WILL BE FUNCTIONAL AND TESTED. PIPE RAMS WILL BE OPERATIONALLY CHECKED EACH 24 HOUR PERIOD. BLIND RAMS WILL BE OPERATIONALLY CHECKED ON EACH TRIP OUT OF THE HOLE. THESE CHECKS WILL BE NOTED ON THE DAILY TOUR SHEETS. A HYDRAULICALLY OPERATED CHOKE WILL BE INSTALLED PRIOR TO DRILLING OUT OF THE INTER CSG SHOE.

Choke Diagram Attachment:

Choke_hose_Spec_X30_20170927134647.pdf

UH_2_10K_20170927134702.pdf

1684_001_20170927134711.pdf

BOP Diagram Attachment:

10M_BOP_Choke_Schematics_BLM_new_20170927134725.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			800	J-55	55	STC	3.12	1.36	DRY	3.17	DRY	1.7
2	INTERMEDIATE	12.25	9.625	NEW	API	N	0	11500	0	-11500			11500	HCL-80	43.5	LTC	1.44	1.12	DRY	1.93	DRY	1.37
3	PRODUCTION	8.5	5.5	NEW	API	N	0	22300	0	-22300			22300	P-110	20	OTHER - TXP BTC	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 P10

Well Number: 17H

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_P10_17H_9_PT_PLAN_20170927134952.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

SD_EA_29_32_P10_17H_9_PT_PLAN_20170927135032.pdf

9.625_43.5lb_L80IC_LTC_20170927135044.pdf

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

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

SD_EA_29_32_P10_17H_9_PT_PLAN_20170927135229.pdf

TenarisXP_BTC_5.500_20_P110_ICY_20170927135239.PDF

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

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	4870	0	4570	1070	2.39	11.9	13.46	100	CLASS C	NONE
INTERMEDIATE	Tail		4570	4870	89	1.33	14.8	6.35	25	CLASS C	NONE
INTERMEDIATE	Lead		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: IN COMPLIANCE WITH ONSHORE #2

Describe the mud monitoring system utilized: VISUAL MUD MONITORING EQPT, PVT, STROKE COUNTER, FLOW SENSOR IN COMPLIANCE WITH ONSHORE ORDER #2

Circulating Medium Table

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
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Additional Operator Remarks

Location of Well

1. SHL: NWNW / 120 FNL / 2605 FWL / TWSP: 26S / RANGE: 33E / SECTION: 29 / LAT: 32.021432 / LONG: -103.594402 (TVD: 0 feet, MD: 0 feet)
PPP: NWNW / 330 FNL / 2010 FWL / TWSP: 26S / RANGE: 33E / SECTION: 29 / LAT: 32.020855 / LONG: -103.596321 (TVD: 12140 feet, MD: 12140 feet)
BHL: SWSW / 180 FSL / 2010 FWL / TWSP: 26S / RANGE: 33E / SECTION: 32 / LAT: 32.000737 / LONG: -103.596287 (TVD: 12213 feet, MD: 23000 feet)

BLM Point of Contact

Name: Priscilla Perez

Title: Legal Instruments Examiner

Phone: 5752345934

Email: pperez@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.



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

SUPO Data Report

02/09/2018

APD ID: 10400015778

Submission Date: 07/11/2017

Highlighted data
reflects the most
recent changes

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

[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_P10_17H_Road_Plat_20170927140530.pdf

Existing Road Purpose: ACCESS, FLUID TRANSPORT

Row(s) Exist? NO

ROW ID(s)

ID:

Do the existing roads need to be improved? YES

Existing Road Improvement Description: REPAIR POT HOLES, CLEAR DITCHES, REPAIR CROWN, ETC.

Existing Road Improvement Attachment:

Section 2 - New or Reconstructed Access Roads

Will new roads be needed? NO

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Attach Well map:

1_Mile_Radius_Map___P10_17H_07-11-2017.pdf

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

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_P10_17H_Well_Plat_20170927140628.pdf

SD_EA_29_32_Fed_Com_P10_17H_20H_PrelimFlowlines_20170927140647.pdf

SD_EA_29_32_Fed_Com_P10_17H_20H_PrelimGas_Lift_Lines_20170927140659.pdf

Section 5 - Location and Types of Water Supply

Water Source Table

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

Water source type: RECYCLED

Describe type:

Source latitude:

Source longitude:

Source datum:

Water source permit type: PRIVATE CONTRACT

Source land ownership: PRIVATE

Water source transport method: PIPELINE

Source transportation land ownership: OTHER

Describe transportation land ownership:

Water source volume (barrels): 659461.25

Source volume (acre-feet): 85

Source volume (gal): 27697372

Water source and transportation map:

SD_EA_29_32_Fed_Com_P10_17H_Work_Area_Detail_07-11-2017.pdf

Water source comments: EXISTING PONDS IN SEC 19,T26S-R33E, FOR FW, & SEC 23 T26S-R32E & SEC 13 FOR RECYCLED WATER.

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:

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

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 WILL BE USED TO CONSTRUCT WELL PAD & ROADS. PURCHASED FROM PRIVATE LAND OWNER-OLIVER KIEHNE CALICHE PIT LOCATED IN SEC 27, T26,R33E, LEA CNTY,NM, AND ALTERNATIVE @ N2 SEC 21, T26S, R33E, LEA COUNTY, NM.

Construction Materials source location attachment:

Section 7 - Methods for Handling Waste

Waste type: GARBAGE

Waste content description: COLLECTED IN A TRASH CONTAINER & DISPOSED OF PROPERLY AT A STATE APPROVED DISPOSAL FACILITY.

Amount of waste: 200 pounds

Waste disposal frequency : Daily

Safe containment description: WILL BE COLLECTED IN TRASH CONTAINER & DISPOSED OF AT STATE APPROVED FACILITY

Safe containmant attachment:

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

Disposal type description:

Disposal location description: STATE APPROVED 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?

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

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

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_2932_Fed_Com_P10_Rig_Layout_07-11-2017.pdf

SD_EA_29_32_Fed_Com_P10_17H_Well_Plat_07-11-2017.pdf

Comments:

Section 10 - Plans for Surface Reclamation

Type of disturbance: New Surface Disturbance

Multiple Well Pad Name: SD EA 29 32 FED COM P10

Multiple Well Pad Number: 17 18 19 20

Recontouring attachment:

SD_EA_29_32_Fed_Com_P10_17H_Reclaim_Plat_07-11-2017.pdf

P10_17H_APD_SUPO_07-11-2017.pdf

Drainage/Erosion control construction: SEE SURFACE USE PLAN

Drainage/Erosion control reclamation: SEE SURFACE USE PLAN

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

Wellpad long term disturbance (acres): 2.45

Access road long term disturbance (acres): 0.02

Pipeline long term disturbance (acres): 0

Other long term disturbance (acres): 0

Total long term disturbance: 2.47

Wellpad short term disturbance (acres): 1.81

Access road short term disturbance (acres): 0.02

Pipeline short term disturbance (acres): 12.811295

Other short term disturbance (acres): 0

Total short term disturbance: 14.6412945

Reconstruction method: SEE SURFACE USE PLAN

Topsoil redistribution: SEE SURFACE USE PLAN

Soil treatment: SEE SURFACE USE PLAN

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: MESQUITE, SHRUBS, GRASS

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 P10

Well Number: 17H

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: NONE NEEDED

Weed treatment plan attachment:

Monitoring plan description: N/A

Monitoring plan attachment:

Success standards: N/A

Pit closure description: N/A

Pit closure attachment:

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

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 P10

Well Number: 17H

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 P10

Well Number: 17H

USFWS Local Office:

Other Local Office:

USFS Region:

USFS Forest/Grassland:

USFS Ranger District:

Section 12 - Other Information

Right of Way needed? YES

Use APD as ROW? YES

ROW Type(s): 288100 ROW – O&G Pipeline, Other

ROW Applications

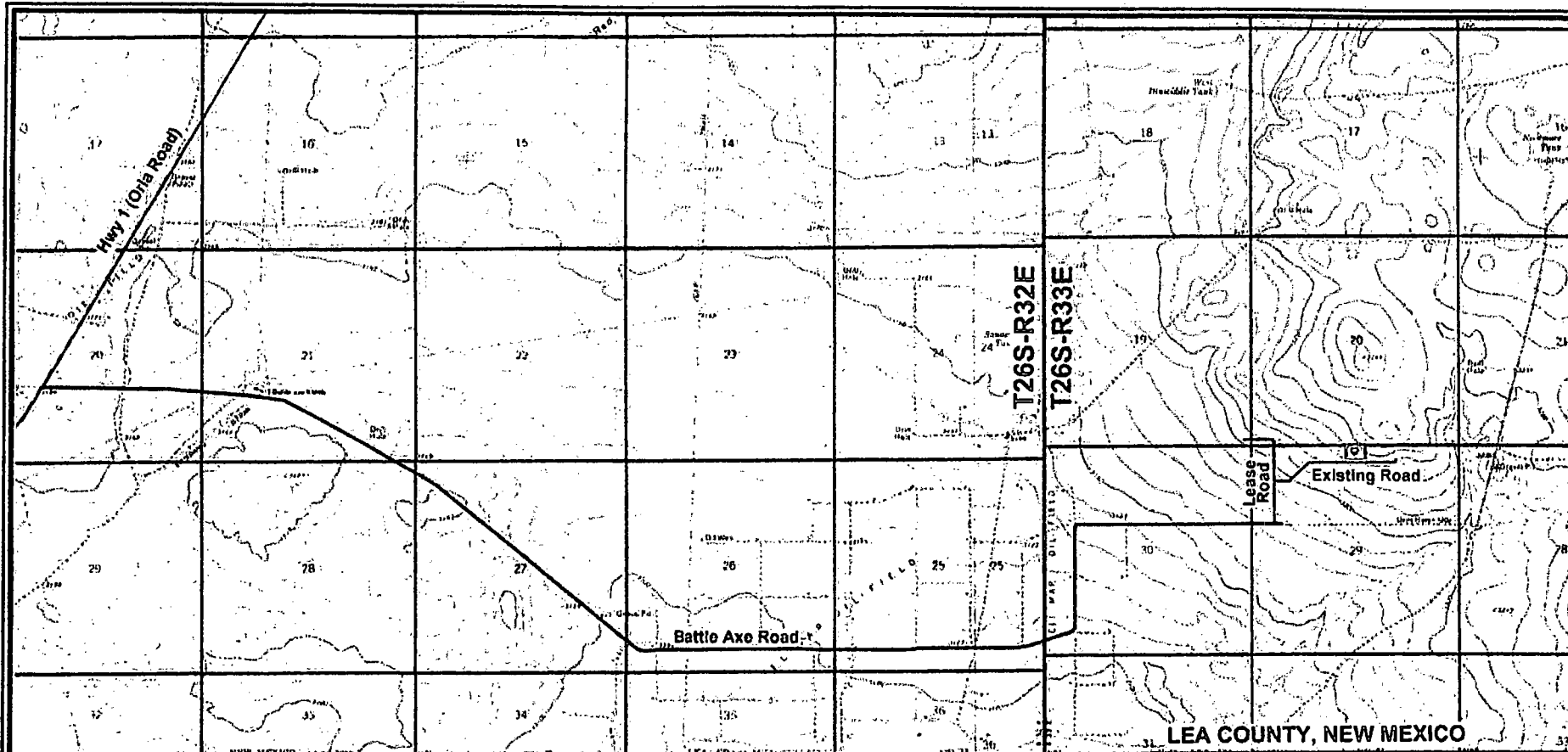
SUPO Additional Information:

Use a previously conducted onsite? YES

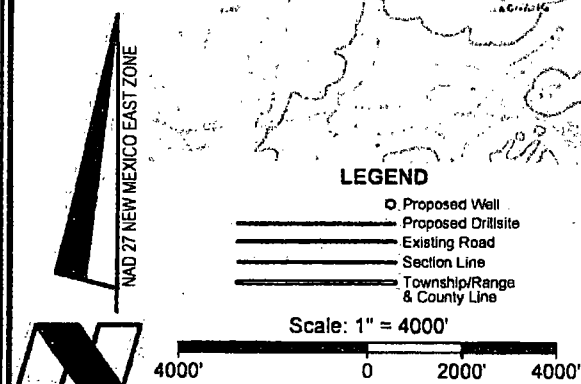
Previous Onsite information: ON-SITE PERFORMED BY BLM NRS: PAUL MURPHY 4/26/2017

Other SUPO Attachment

SD_EA_29_32_Fed_Com_P10_17H_Pad_Cut_n_Fill_07-11-2017.pdf



LEA COUNTY, NEW MEXICO
 LOVING COUNTY, TEXAS



LEGEND

- Proposed Well
- Proposed Drillsite
- Existing Road
- Section Line
- Township/Range & County Line

FOR THE EXCLUSIVE USE OF
 CHEVRON U.S.A. INC.
 I, Robert L. Lastrapes, Professional
 Surveyor, do hereby state this plat is true
 and correct to the best of my knowledge.



DIRECTIONS TO LOCATION:

From Hwy 1 (Orla Road), head Easterly on Battle Axe Road approximately 7.00 miles to an existing lease road. Head North on existing lease road approximately 0.20 miles to an existing access road. Head East on existing access road approximately 0.38 miles to the Proposed Pad Location.

ROAD PLAT

CHEVRON U.S.A. INC.
 SD EA 29 32 FED COM P10 NO. 17H WELL
 LOCATED 120' FNL AND 2,605' FWL
 SECTION 29, T26S-R33E
 LEA COUNTY, NEW MEXICO

DRAWN BY: BOR		REVISIONS	
PROJ. MGR.: VHV	No. 1	DATE: 04/04/2017	REVISED BY: KJD
DATE: 03/15/2017	No. 2	DATE: 05/02/2017	REVISED BY: BOR
FILENAME: T:\2015\2152310\DWG\SD EA 29 32 Fed Com P10 No. 17H Road Plat.dwg			



C. H. Fenstermaker & Associates, L.L.C.
 135 Regency Sq., Lafayette, LA 70508
 Ph. 337-237-2200 Fax. 337-232-3299
 www.fenstermaker.com

Robert L. Lastrapes
 Registration No. 23006



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

PWD Data Report

02/09/2018

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:

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:



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

Bond Info Data Report

02/09/2018

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:

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

	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	201 0	FWL	26S	33E	32	Aliquot SWS W	32.00114 9	- 103.5962 88	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 27506	- 890 5	121 40	121 40
BHL Leg #1	180	FSL	201 0	FWL	26S	33E	32	Aliquot SWS W	32.00073 7	- 103.5962 87	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 27506	- 897 8	230 00	122 13



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

Operator Certification Data Report

02/09/2018

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: 07/07/2017

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:



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

Application Data Report

02/09/2018

APD ID: 10400015778

Submission Date: 07/11/2017

Highlighted data
reflects the most
recent changes

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

[Show Final Text](#)

Well Type: OIL WELL

Well Work Type: Drill

Section 1 - General

APD ID: 10400015778

Tie to previous NOS?

Submission Date: 07/11/2017

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

Master 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 P10

Well Number: 17H

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? USEABLE WATER

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

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: 17 18 19 20

Well Class: HORIZONTAL

29 32 FED COM P10

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: 120 FT

Reservoir well spacing assigned acres Measurement: 237.37 Acres

Well plat: SD_EA_29_32_P10_17H_C102_07-07-2017.pdf

SD_EA_29_32_Fed_Com_P10_17H_Well_Plat_07-07-2017.pdf

Well work start Date: 01/01/2018

Duration: 120 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83

Vertical Datum: NGVD29

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	120	FNL	260 5	FWL	26S	33E	29	Aliquot NWN W	32.02143 2	- 103.5944 02	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 27506	323 5	0	0
KOP Leg #1	120	FNL	260 5	FWL	26S	33E	29	Aliquot NWN W	32.02143 2	- 103.5944 02	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 27506	323 5	0	0
PPP Leg #1	330	FNL	201 0	FWL	26S	33E	29	Aliquot NWN W	32.02085 5	- 103.5963 21	LEA	NEW MEXI CO	NEW MEXI CO	F	NMNM 27506	- 890 5	121 40	121 40

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

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
800	1115 0	OIL-BASED MUD	8.7	9.2							
1115 0	1230 0	OIL-BASED MUD	9.5	13.5							
1230 0	2230 0	OIL-BASED MUD	9.5	13.5							
0	800	SPUD MUD	8.3	8.7							

Section 6 - Test, Logging, Coring

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

DRILL STEM TESTS NOT PLANNED

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

MWD

Coring operation description for the well:

CONVENTIONAL WHOLE CORE SAMPLES ARE NOT PLANNED

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 8573

Anticipated Surface Pressure: 5886.14

Anticipated Bottom Hole Temperature(F): 160

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

Describe:

Contingency Plans geohazards description:

Contingency Plans geohazards attachment:

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations plan:

SD_EA_29_32_Fed_Com_P10_H2S_07-11-2017.pdf

Operator Name: CHEVRON USA INCORPORATED

Well Name: SD EA 29 32 FED COM P10

Well Number: 17H

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

SD_EA_29_32_P10_17H_PLOT_07-11-2017.pdf

SD_EA_29_32_P10_17H_DIREC_SURV_07-11-2017.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

Gas_Capture_Plan_Form_Pad_10_20170927140100.pdf

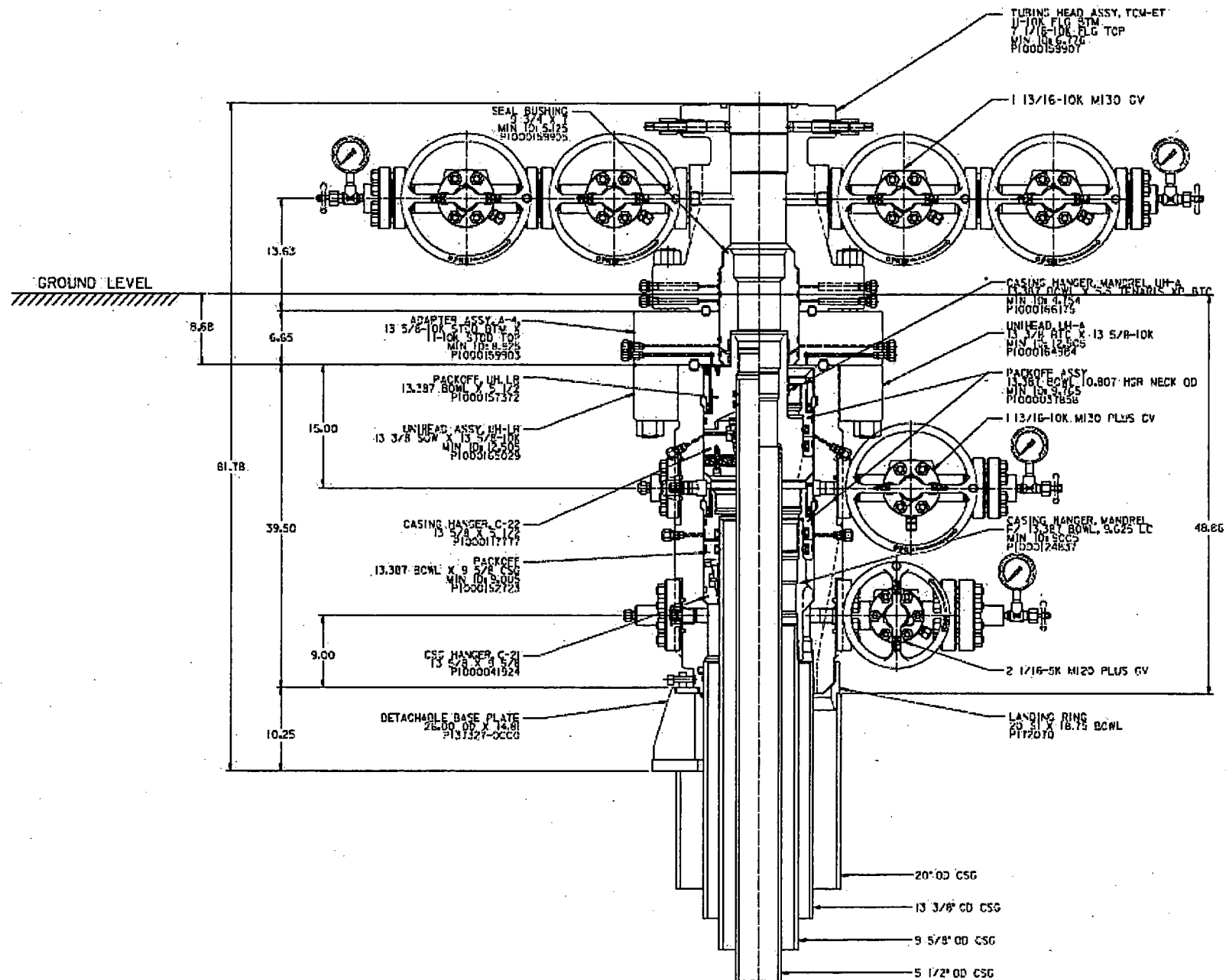
Other Variance attachment:



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 SOUR C/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.	
Pressure test with water at ambient temperature					
See attachment. (1 page)					
↑ 10 mm = 10 Min. → 10 mm = 25 MPa					
COUPLINGS Type		Serial N°		Quality	
3" coupling with 4 1/16" 10K API Swivel Flange end Hub		1435 1436		AISI 4130 AISI 4130 AISI 4130	
				Heat N° A1258U 034939 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) 	

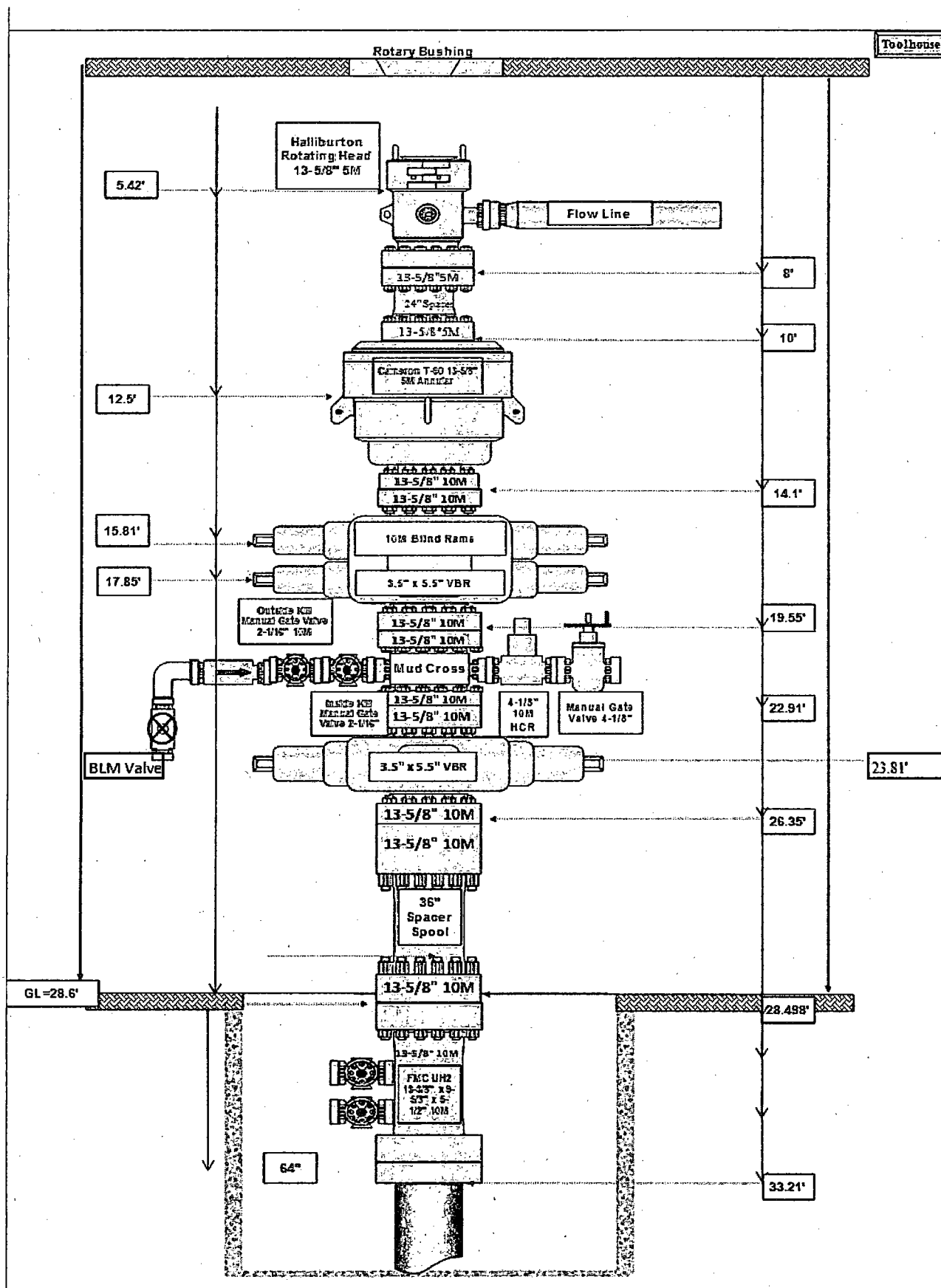


Diagram A

CHOKE MANIFOLD SCHEMATIC

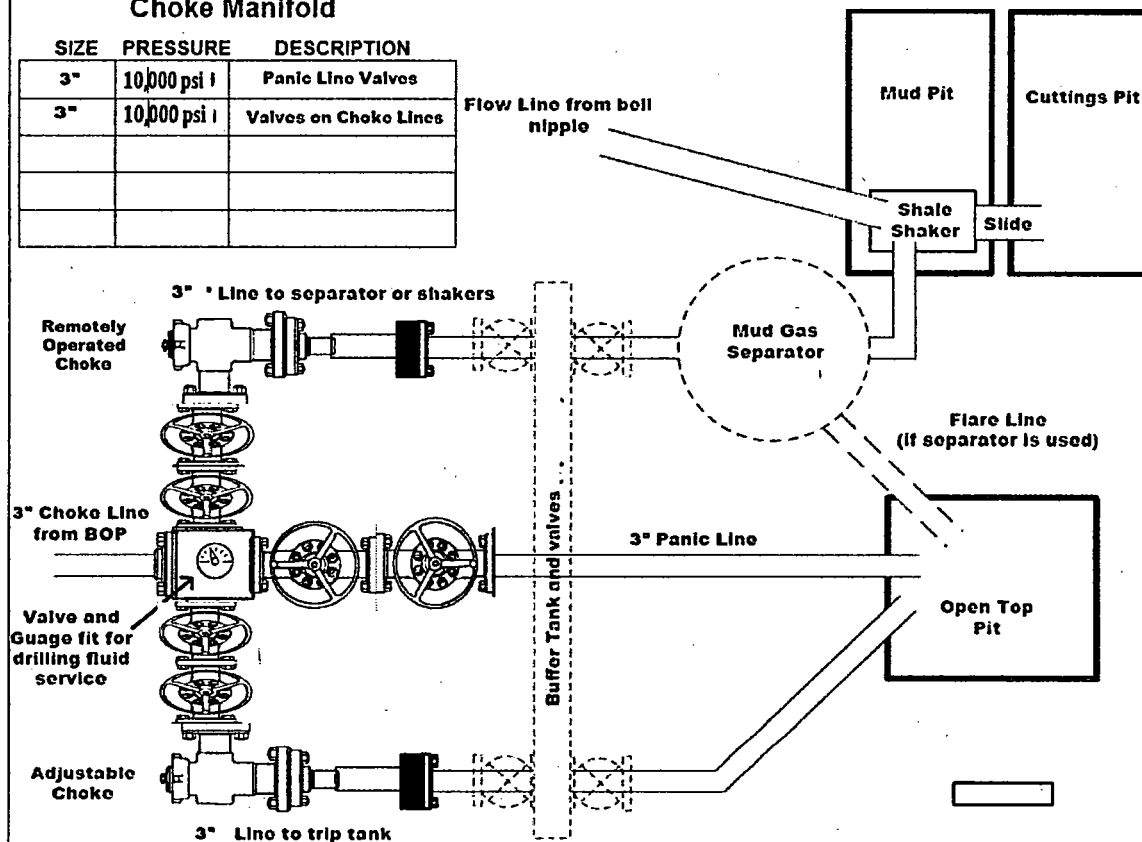
Minimum Requirements

OPERATION : Wolfcamp A wells

Minimum System Pressure Rating : 10,000 psi

Choke Manifold

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



Installation Checklist

The following item 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 two 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: _____

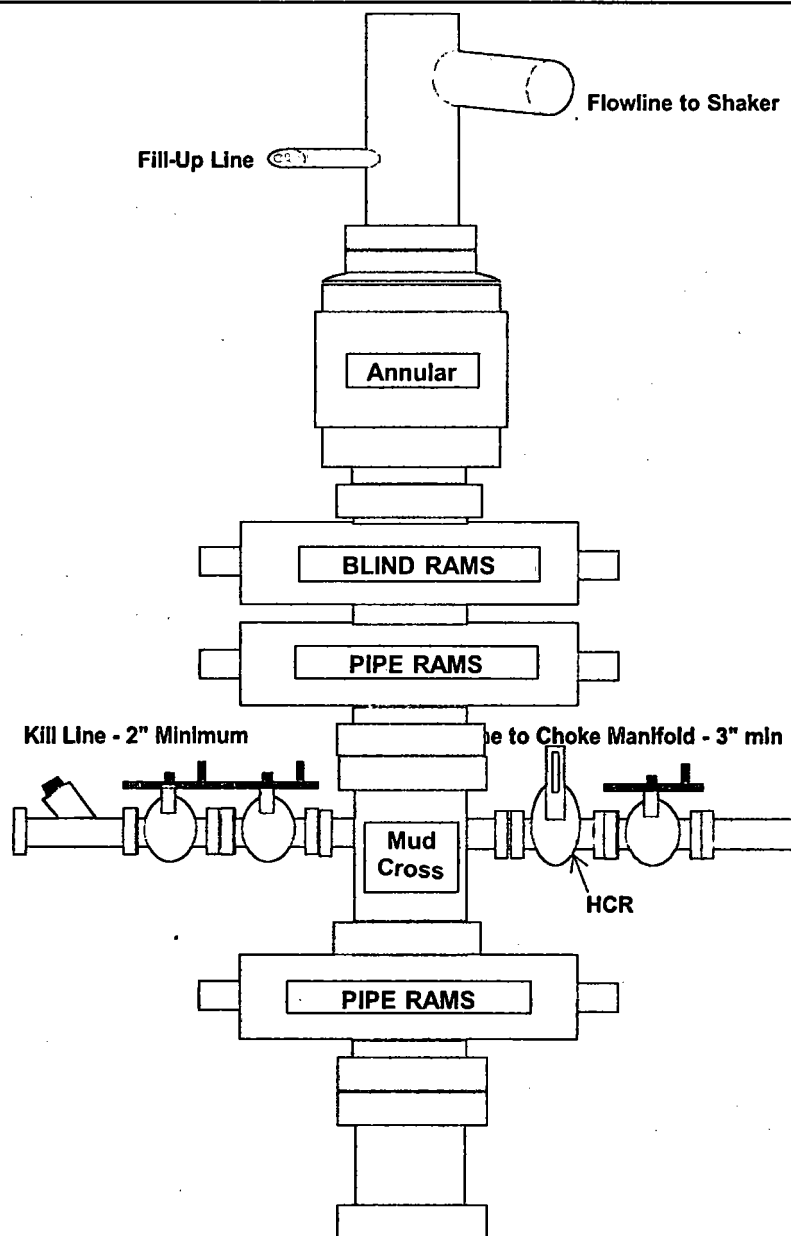
Date: _____

10M BLOWOUT PREVENTER SCHEMATIC

Minimum Requirements

OPERATION: Wolfcamp Wells in Salado Draw

Minimum System Pressure Rating: 10,000 PSI

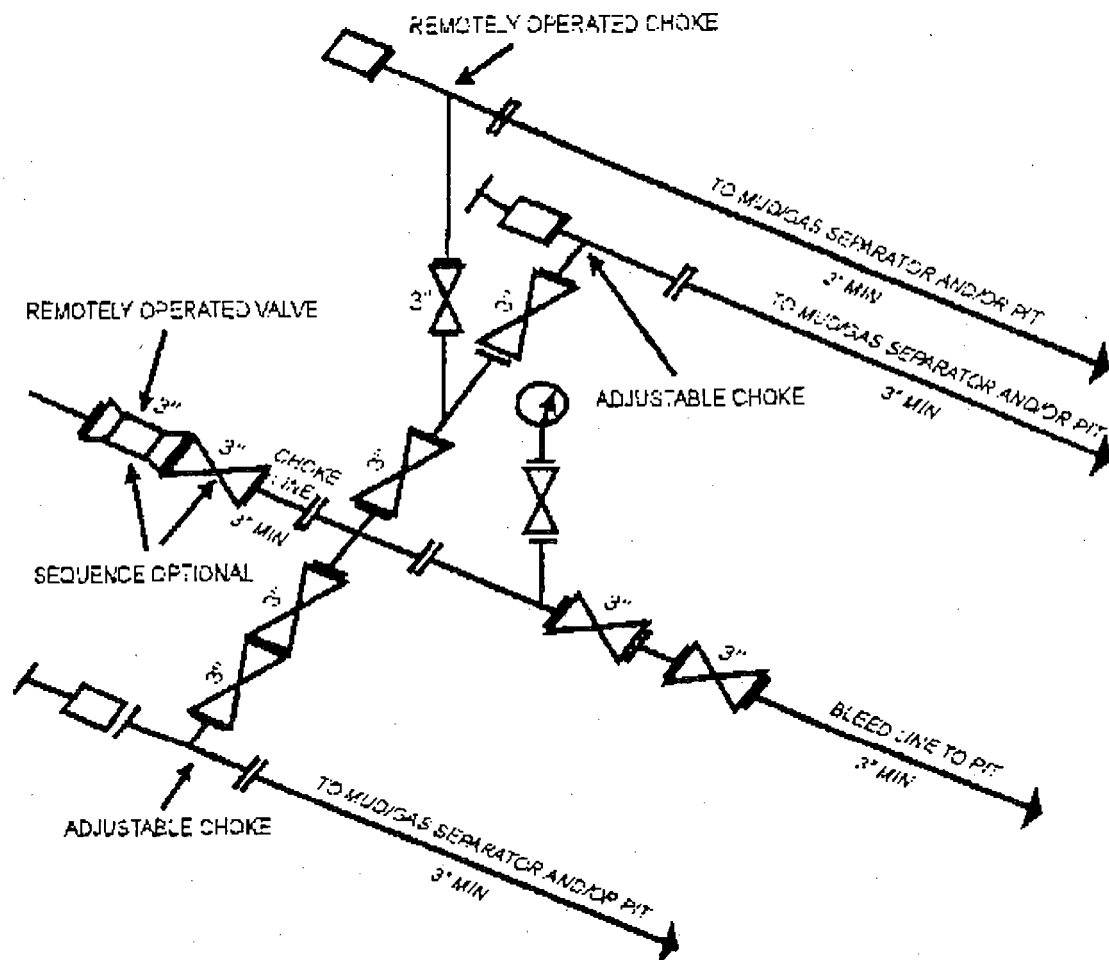


10M Choke Manifold SCHEMATIC

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]