

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

Operator Certification Data Report 06/02/2025

Operator

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: MELISSA GUI	DRY	Signed on: 04/16/2025
Title: Advisor Regulato	ory Sr.	
Street Address: 5 GR	EENWAY PLAZA SUITE 110	
City: HOUSTON	State: TX	Zip: 77026
Phone: (713)497-2481		
Email address: MELIS	SSA_GUIDRY@OXY.COM	
Field	d	
Representative Name	:	
Street Address:		
City:	State:	Zip:
Phone:		
Email address:		



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

APD ID: 10400097548

Submission Date: 03/20/2024

Highlighted data reflects the most recent changes

Show Final Text

Operator Name: OXY USA INCORPORATED

Well Name: CHUCK SMITH MDP1 8_17 FED COM

Well Type: OIL WELL

Well Number: 51H

Well Work Type: Drill

Section 1 - General

APD ID: 10400097548 Tie to previous NOS? N Submission Date: 03/20/2024

BLM Office: Carlsbad

User: MELISSA GUIDRY

Title: Advisor Regulatory Sr.

Federal/Indian APD: FED

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

Lease number: NMNM142143

Lease Acres:

Surface access agreement in place?

Allotted?

Reservation:

Agreement in place? NO

Federal or Indian agreement:

Agreement number:

Agreement name:

Keep application confidential? N

Permitting Agent? NO

Operator letter of

APD Operator: OXY USA INCORPORATED

Operator Info

Operator Organization Name: OXY USA INCORPORATED

Operator Address: P.O. BOX 1002

Operator PO Box:

Operator City: TUPMAN

State: CA

Operator Phone: (661)763-6046

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: CHUCK SMITH MDP1 8_17 FED COM

Well Number: 51H Well API Number:

Zip: 93276-1002

Field/Pool or Exploratory? Field and Pool

Field Name: WILLOW LAKE

Pool Name: BONE SPRING

SOUTHEAST

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

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

Is the proposed well in a Helium production area? N Use Existing Well Pad? N New surface disturbance?

Type of Well Pad: MULTIPLE WELL

Multiple Well Pad Name: SNDDNS_T24SR31E

Number: 0509

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: Distance to nearest well: 30 FT Distance to lease line: 1049 FT

Reservoir well spacing assigned acres Measurement: 640 Acres

Well plat: CHUCKSMITHMDP18_17FEDCOM51H_C102_20240315144607.pdf

CHUCKSMITHMDP18_17FEDCOM51H_SitePlan_20240716063715.pdf

Well work start Date: 03/14/2025 Duration: 45 DAYS

Section 3 - Well Location Table

Survey Type: RECTANGULAR

Describe Survey Type:

Datum: NAD83 Vertical Datum: NAVD88

Survey number: Reference Datum: GROUND LEVEL

Wellbore	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	Will this well produce from this
SHL Leg #1	104 9	FSL	167 0	FW L	24S	31E	5		32.24199 83	- 103.8029 755	EDD Y	1	NEW MEXI CO	F	NMNM 104730	346 7			N
KOP Leg #1	300	FSL	800	FW L	24S	31E	5	Aliquot SWS W	32.23993 9	- 103.8057 952	EDD Y	1	NEW MEXI CO	F	NMNM 82904	- 813 3	116 96	116 00	N

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Wellbore	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	Will this well produce from this
PPP Leg #1-1	0	FNL	800	FW L	24S	31E	8	Aliquot NWN W	32.23911 44	- 103.8057 971	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 142143	- 856 8	122 26	120 35	N
PPP Leg #1-2	100	FNL	800	FW L	24\$	31E	8	Aliquot NWN W	32.23883 95	- 103.8057 977	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 142143	- 863 3	125 27	121 00	Υ
PPP Leg #1-3	132 2	FSL	800	FW L	24S	31E	8	Aliquot SWS W	32.22822 59	- 103.8058 024	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 142692	- 863 3	162 03	121 00	Y
PPP Leg #1-4	0	FNL	800	FW L	24S	31E	17	Aliquot NWN W	32.22459 17	- 103.8058 04	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 89172	- 863 3	175 25	121 00	Y
EXIT Leg #1	100	FSL	800	FW L	24S	31E	17	Aliquot SWS W	32.21034 46	- 103.8058 104	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 89172	- 863 3	227 08	121 00	Y
BHL Leg #1	20	FSL	800	FW L	24S	31E	17	Aliquot SWS W	32.21012 47	- 103.8058 105	EDD Y	NEW MEXI CO	NEW MEXI CO	F	NMNM 89172	- 863 3	227 88	121 00	N



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

Drilling Plan Data Report

06/02/2025

APD ID: 10400097548

Submission Date: 03/20/2024

Highlighted data reflects the most recent changes

Operator Name: OXY USA INCORPORATED

Well Name: CHUCK SMITH MDP1 8_17 FED COM

Well Number: 51H

Well Type: OIL WELL

Well Work Type: Drill

Show Final Text

Section 1 - Geologic Formations

Formation ID	Formation Name	Elevation	True Vertical	Measured Depth	Lithologies	Mineral Resources	Producing Formatio
15735434	RUSTLER	3467	607	607	ANHYDRITE, DOLOMITE, SHALE	USEABLE WATER	N
15735435	SALADO	2498	969	969	ANHYDRITE, DOLOMITE, HALITE, SHALE	OTHER : SALT	N
15735436	CASTILE	653	2814	2814	ANHYDRITE	OTHER : SALT	N
15735437	DELAWARE	-755	4222	4222	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	Y
15735438	BELL CANYON	-777	4244	4244	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	Y
15735439	CHERRY CANYON	-1742	5209	5209	SANDSTONE, SILTSTONE	NATURAL GAS, OIL, OTHER : BRINE	Y
15735440	BRUSHY CANYON	-2955	6422	6438	SANDSTONE, SILTSTONE	OTHER : LOSSES	N
15735441	BONE SPRING	-4630	8097	8139	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
15735442	BONE SPRING 1ST	-5662	9129	9187	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
15735443	BONE SPRING 2ND	-6317	9784	9852	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
15735444	BONE SPRING 3RD	-7564	11031	11118	LIMESTONE, SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y
15735445	WOLFCAMP	-8016	11483	11577	SANDSTONE, SILTSTONE	NATURAL GAS, OIL	Y

Section 2 - Blowout Prevention

Pressure Rating (PSI): 10M Rating Depth: 12100

Equipment: 13-5/8" 5M Annular, 10M Blind Ram, 10M Double Ram

Requesting Variance? YES

Variance request: Request for the use of a flexible choke line from the BOP to Choke Manifold.

Testing Procedure: BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR part 3170 Subpart 3172 requirements. The System may be

Page 1 of 7

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

upgraded to a higher pressure but still tested to the working pressure listed in the table above. 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. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold. OXY requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. See the attached BOP Break Testing variance.

Choke Diagram Attachment:

CHUCKSMITHMDP18_17FEDCOM51H_ChkManifolds_20240319214859.pdf

BOP Diagram Attachment:

CHUCKSMITHMDP18_17FEDCOM51H_BOP_20240319214907.pdf

CHUCKSMITHMDP18_17FEDCOM51H_FlexHoseCert_20240319214926.pdf

CHUCKSMITHMDP18_17FEDCOM51H_13inADAPT_13.375in_7in_10x10_20240319214941.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	909	0	909	3467	2558	909	J-55	54.5	BUTT	1	1.1	BUOY	1.4	BUOY	1.4
2	INTERMED IATE	12.2 5	9.625	NEW	API	N	0	11596	0	11500	3698	-8033	11596	HCL -80	40	BUTT	1	1.1	BUOY	1.4	BUOY	1.4
3	PRODUCTI ON	8.75	7.0	NEW	API	N	0	12146	0	11850	3698	-8383	12146	P- 110	-	OTHER - WEDGE 461	1	1.1	BUOY	1.4	BUOY	1.4
4	PRODUCTI ON	8.5	5.5	NEW	API	N	12146	22788	11850	12100	-8383	-8633	10642	P- 110	-	OTHER - Wedge 461	1	1	BUOY	1.4	BUOY	1.4

Casing Attachments

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

asing Attachments
Casing ID: 1 String SURFACE
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
CHUCKSMITHMDP18_17FEDCOM51H_CsgCriteria_20240319215115.pdf
Casing ID: 2 String INTERMEDIATE
Inspection Document:
Spec Document:
Tapered String Spec:
Casing Design Assumptions and Worksheet(s):
CHUCKSMITHMDP18_17FEDCOM51H_CsgCriteria_20240319215223.pdf
Casing ID: 3 String PRODUCTION
Inspection Document:
Spec Document:
Tapered String Spec:
. apo. ca. cg -pee.
Casing Design Assumptions and Worksheet(s):

CHUCKSMITHMDP18_17FEDCOM51H_CsgCriteria_20240319215350.pdf

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Casing Attachments

Casing ID: 4

String

PRODUCTION

Inspection Document:

Spec Document:

Tapered String Spec:

Casing Design Assumptions and Worksheet(s):

CHUCKSMITHMDP18_17FEDCOM51H_CsgCriteria_20240319215540.pdf

CHUCKSMITHMDP18_17FEDCOM51H_TNSWedge461_5.500in_20.00ppf_P110CY_20240319215548.pdf

CHUCKSMITHMDP18_17FEDCOM51H_TNSWedge461_7.000in_32.00ppf_P110CY_20240319215557.pdf

Section 4 - Cement

String Type	Lead/Tail	Stage Tool Depth	Тор МD	Bottom MD	Quantity(sx)	Yield	Density	Cu Ft	Excess%	Cement type	Additives
SURFACE	Lead	1	0	909	950	1.33	14.8	1266	100	Class C	Accelerator
INTERMEDIATE	Lead	2	0	6688	1516	1.71	13.3	2592	25	Class C	Accelerator
INTERMEDIATE	Lead	1	6688	1159 6	978	1.65	13.2	1614	5	Class H	Accelerator, Dispersant, Salt

	Р	RODUCTION	Lead	1	1109 6	2278 8	2567	1.38	13.2	3542	25	Class H	Retarder, Dispersant, Salt
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Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

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 43 CFR 3172:

Diagram of the equipment for the circulating system in accordance with 43 CFR 3172:

Describe what will be on location to control well or mitigate other conditions: Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

Describe the mud monitoring system utilized: PVT/MD Totco/Visual Monitoring

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)	РН	Viscosity (CP)	Salinity (ppm)	Filtration (cc)	Additional Characteristics
0	909	WATER-BASED MUD	8.6	8.8							
909	1159 6	OTHER: SATURATED BRINE-BASED OR OIL-BASED MUD	8	10							
1159 6	2278 8	OTHER: WATER-BASED MUD OR OIL- BASED MUD	9.5	13.5							

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Section 6 - Test, Logging, Coring

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

GR from TD to surface (horizontal well vertical portion of hole)

Mud Log from Bone Spring - TD

CBL (production string) - to be ran by completions.

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

GAMMA RAY LOG, CEMENT BOND LOG, DIRECTIONAL SURVEY, MUD LOG/GEOLOGICAL LITHOLOGY LOG,

Coring operation description for the well:

No coring is planned at this time.

Section 7 - Pressure

Anticipated Bottom Hole Pressure: 8495 Anticipated Surface Pressure: 5832

Anticipated Bottom Hole Temperature(F): 177

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

Describe:

Contingency Plans geoharzards description:

Contingency Plans geohazards

Hydrogen Sulfide drilling operations plan required? YES

Hydrogen sulfide drilling operations

CHUCKSMITHMDP18_17FEDCOM51H_H2S1_20240319220649.pdf CHUCKSMITHMDP18_17FEDCOM51H_H2S2_20240319220657.pdf

Section 8 - Other Information

Proposed horizontal/directional/multi-lateral plan submission:

CHUCKSMITHMDP18_17FEDCOM51H_DirectPlan_20240319220838.pdf

Other proposed operations facets description:

Other proposed operations facets attachment:

CHUCKSMITHMDP18_17FEDCOM51H_DrillPlan_20240319220853.pdf CHUCKSMITHMDP18_17FEDCOM51H_SpudRigData_20240319220903.pdf

Other Variance request(s)?:

Other Variance attachment:

CHUCKSMITHMDP18_17FEDCOM51H_BOPBreakTestingVariance_20240319220933.pdf CHUCKSMITHMDP18_17FEDCOM51H_BradenheadCBLVariance_20240319220942.pdf CHUCKSMITHMDP18_17FEDCOM51H_OfflineCementVariance_20240319220954.pdf

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

CHUCKSMITHMDP18_17FEDCOM51H_ProdCsgAnnClearanceVariance_20240319221005.pdf



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

SUPO Data Repoi

APD ID: 10400097548

Submission Date: 03/20/2024

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Well Name: CHUCK SMITH MDP1 8_17 FED COM

Well Type: OIL WELL

Well Number: 51H

Well Work Type: Drill

Highlighted data reflects the most recent changes Show Final Text

Section 1 - Existing Roads

Will existing roads be used? YES

Existing Road Map:

CHUCKSMITHMDP18_17FEDCOM51H_ExistRoads_20240319221048.pdf

Existing Road Purpose: ACCESS, 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 2 - New or Reconstructed Access Roads

Will new roads be needed? YES

New Road Map:

CHUCKSMITHMDP18_17FEDCOM51H_NewRoads_20240716063734.pdf

New road type: LOCAL

Length: 1804

Feet

Width (ft.): 30

Max slope (%): 0

Max grade (%): 0

Army Corp of Engineers (ACOE) permit required? N

ACOE Permit Number(s):

New road travel width: 20

New road access erosion control: Watershed diversion every 200', if needed.

New road access plan or profile prepared? N

New road access plan

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Access road engineering design? N

Access road engineering design

Turnout? N

Access surfacing type: OTHER

Access topsoil source: ONSITE

Access surfacing type description: CALICHE

Access onsite topsoil source depth: 0

Offsite topsoil source description:

Onsite topsoil removal process: If available

Access other construction information:

Access miscellaneous information:

Number of access turnouts:

Access turnout map:

Drainage Control

New road drainage crossing: CULVERT

Drainage Control comments: Watershed diversion every 200', if needed.

Road Drainage Control Structures (DCS) description: Watershed diversion every 200', if needed.

Road Drainage Control Structures (DCS) attachment:

Access Additional Attachments

Section 3 - Location of Existing Wells

Existing Wells Map? YES

Existing Well map Attachment:

CHUCKSMITHMDP18_17FEDCOM51H_ExistWells_20240319221220.pdf

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:

CHUCKSMITHMDP18_17FEDCOM51H_LeaseFacility_20240716090322.pdf

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Section 5 - Location and Types of Water Supply

Water Source Table

Water source type: GW WELL

Water source use type: SURFACE CASING

OTHER Describe use type: DRILLING

INTERMEDIATE/PRODUCTION

CASING

Source latitude: Source longitude:

Source datum:

City:

Water source permit type: WATER WELL

Water source transport method: PIPELINE

TRUCKING

Source land ownership: COMMERCIAL

Source transportation land ownership: COMMERCIAL

Water source volume (barrels): 2000 Source volume (acre-feet): 0.25778619

Source volume (gal): 84000

Water source and transportation

 $CHUCKSMITHMDP18_17FEDCOM51H_GRRW trSrc_20240319221321.pdf$

CHUCKSMITHMDP18_17FEDCOM51H_MesqWtrSrc_20240319221330.pdf

CHUCKSMITHMDP18_17FEDCOM51H_WaterCalicheSourceMap_20240716085807.pdf

Water source comments: This well will be drilled using a combination of water mud systems. It will be obtained from commercial water stations (Gregory Rockhouse, Mesquite) in the area and will be hauled to location by transport truck using existing and proposed roads.

New water well? N

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 Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

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

Using any construction materials: YES

Construction Materials description: Primary All caliche utilized for the drilling pad and proposed access road will be obtained from an existing BLM/State/Fee approved pit or from prevailing deposits found on the location. Will use BLM recommended extra caliche from other locations close by for roads, if available. Secondary The secondary way of obtaining caliche to build locations and roads will be by turning over the location. This means, caliche will be obtained from the actual well site. A caliche permit will be obtained from BLM prior to pushing up any caliche. 2400 cubic yards is max amount of caliche needed for pad and roads. Amount will vary for each pad. The procedure below has been approved by BLM personnel: a. The top 6 of topsoil is pushed off and stockpiled along the side of the location. b. An approximate 120 X 120 area is used within the proposed well site to remove caliche. c. Subsoil is removed and piled alongside the 120 X 120 within the pad site. d. When caliche is found, material will be stockpiled within the pad site to build the location and road. e. Then subsoil is pushed back in the hole and caliche is spread accordingly across entire location and road. f. Once the well is drilled the stockpiled top soil will be used for interim reclamation and spread along areas where caliche is picked up and the location size is reduced. Neither caliche nor subsoil will be stockpiled outside of the well pad. Topsoil will be stockpiled along the edge of the pad as depicted in the site plan included with this APD.

Construction Materials source location

CHUCKSMITHMDP18 17FEDCOM51H WaterCalicheSourceMap 20240716085842.pdf

Section 7 - Methods for Handling

Waste type: DRILLING

Waste content description: Water-Based Cuttings, Water-Based Mud, Oil-Based Cuttings, Oil-Based Mud, Produced Water

Amount of waste: 1779 barrels

Waste disposal frequency: Daily

Safe containment description: Haul-Off Bins

Safe containment attachment:

Waste disposal type: HAUL TO COMMERCIAL Disposal location ownership: COMMERCIAL

FACILITY

Disposal type description:

Disposal location description: An approved facility that can process drill cuttings, drill fluids, flowback water, produced water, contaminated soils, and other non-hazardous wastes. Methods of Handling Waste Material: a. A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins.

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility. Solids-CRI, Liquids-Laguna b. All trash, junk and other waste material will be contained in trash cages or bins to prevent scattering. When the job is completed, all contents will be removed and disposed of in an approved sanitary landfill. c. The supplier, including broken sacks, will pickup slats remaining after completion of well. d. A Porto-john will be provided for the rig crews. This equipment will be properly maintained during the drilling and completion operations and will be removed when all operations are complete. e. Disposal of fluids to be transported will be by the following companies. TFH Ltd, Laguna SWD Facility

Reserve Pit

Reserve Pit being used? NO

Temporary disposal of produced water into reserve pit? NO

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? Y

Description of cuttings location A closed loop system will be utilized consisting of above ground steel tanks and haul-off bins. Disposal of liquids, drilling fluids and cuttings will be disposed of at an approved facility.

Cuttings area length (ft.)

Cuttings area width (ft.)

Cuttings area depth (ft.)

Cuttings area volume (cu. yd.)

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

Cuttings area liner

Cuttings area liner specifications and installation description

Section 8 - Ancillary

Are you requesting any Ancillary Facilities?: N

Ancillary Facilities

Comments:

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Section 9 - Well Site

Well Site Layout Diagram:

CHUCKSMITHMDP18_17FEDCOM51H_ClosedLoop_20240319221614.pdf

Comments:

Section 10 - Plans for Surface

Type of disturbance: New Surface Disturbance Multiple Well Pad Name: SNDDNS T24SR31E

Multiple Well Pad Number: 0509

Recontouring

CHUCKSMITHMDP18_17FEDCOM51H_CutFill_20240716083119.pdf CHUCKSMITHMDP18 17FEDCOM51H SitePlan 20240716083128.pdf

Drainage/Erosion control construction: Reclamation to be wind rowed as needed to control erosion.

Drainage/Erosion control reclamation: Reclamation to be wind rowed as needed to control erosion.

Well pad proposed disturbance

(acres): 6.67

Road proposed disturbance (acres):

0.87

Powerline proposed disturbance

(acres): 3.1

Pipeline proposed disturbance

(acres): 32.64

Other proposed disturbance (acres):

0.78

Total proposed disturbance: 44.06

Well pad interim reclamation (acres): Well pad long term disturbance 0.27

Road interim reclamation (acres): 0.29 Road long term disturbance (acres):

0.58

(acres): 6.4

(acres): 0

(acres): 10.88

Powerline interim reclamation (acres): Powerline long term disturbance

Pipeline interim reclamation (acres):

21.76

Other interim reclamation (acres): 0

Other long term disturbance (acres):

Pipeline long term disturbance

0.78

Total interim reclamation: 25.42 Total long term disturbance: 18.64

Disturbance Comments:

Reconstruction method: If the well is deemed commercially productive, caliche from the areas of the pad site not required for operations will be reclaimed. The original topsoil will be returned to the area of the drill pad not necessary to operate the well. These unused areas of the drill pad will be contoured, as close as possible, to match the original topography, and the are will be seeded with an approved BLM mixture to re-establish vegetation. After concluding the drilling and/or completion operations, if the well is found non-commercial, the caliche will be removed from the pad and transported to the original caliche pit or used for other drilling locations. The road will be reclaimed as directed by the BLM. the original topsoil will again be returned to the pad and contoured, as close as possible, to the original topography and the area will be seeded with an approved BLM mixture to re-establish vegetation.

Topsoil redistribution: The original topsoil will be returned to the area of the drill pad not necessary to operate the well.

Soil treatment: To be determined by BLM.

Existing Vegetation at the well pad: To be determined by BLM at onsite.

Existing Vegetation at the well pad

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Existing Vegetation Community at the road: To be determined by BLM at onsite.

Existing Vegetation Community at the road

Existing Vegetation Community at the pipeline: To be determined by BLM at onsite.

Existing Vegetation Community at the pipeline

Existing Vegetation Community at other disturbances: To be determined by BLM at onsite.

Existing Vegetation Community at other disturbances

Non native seed used? N

Non native seed description:

Seedling transplant description:

Will seedlings be transplanted for this project? N

Seedling transplant description attachment:

Will seed be harvested for use in site reclamation? N

Seed harvest description:

Seed harvest description attachment:

Seed

Seed Table

Seed Summary

Seed Type Pounds/Acre

Seed reclamation

Operator Contact/Responsible Official

First Name: Mike Last Name: Wilson

Phone: (575)631-6618 Email: Michael_Wilson@oxy.com

Total pounds/Acre:

Seedbed prep:

Seed BMP:

Seed method:

Existing invasive species? N

Existing invasive species treatment description:

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Existing invasive species treatment

Weed treatment plan description: To be determined by BLM.

Weed treatment plan

Monitoring plan description: To be determined by BLM.

Monitoring plan

Success standards: To be determined by BLM.

Pit closure description: NA

Pit closure attachment:

Section 11 - Surface

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: NEW ACCESS ROAD

Describe:

Surface Owner: BUREAU OF LAND MANAGEMENT

Other surface owner description:

BIA Local Office:

Operator Name: OXY USA INCORPORATED	
Well Name: CHUCK SMITH MDP1 8_17 FED COM	Well Number: 51H
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:	
USFWS Local Office:	
Other Local Office:	
USFS Region:	
USFS Forest/Grassland:	USFS Ranger District:

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Disturbance type: OTHER

Describe: ELECTRIC LINES

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:

Section 12 - Other

Right of Way needed? Y

Use APD as ROW? Y

ROW Type(s): 281001 ROW - ROADS,285003 ROW - POWER TRANS,288100 ROW - O&G Pipeline,288101 ROW - O&G Facility Sites,289001 ROW- O&G Well Pad

ROW

SUPO Additional Information: Permian Basin MOA: To be submitted after APD acceptance. GIS shapefiles available for BLM.

Use a previously conducted onsite? N

Previous Onsite information:

Other SUPO

CHUCKSMITHMDP18_17FEDCOM51H_StakingSheet_20240319222257.pdf CHUCKSMITHMDP18_17FEDCOM51H_NGMP_20240319222309.pdf



U.S. Department of the Interior BUREAU OF LAND MANAGEMENT PWD Data Report

PWD disturbance (acres):

Operator Name: OXY USA INCORPORATED

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Well Type: OIL WELL Well Work Type: Drill

Section 1 - General

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

Section 2 - Lined

Would you like to utilize Lined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

Other PWD Surface Owner Description:

Lined pit PWD on or off channel:

Lined pit PWD discharge volume (bbl/day):

Lined pit

Pit liner description:

Pit liner manufacturers

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Lined pit precipitated solids disposal schedule:

Lined pit precipitated solids disposal schedule

Lined pit reclamation description:

Lined pit reclamation

Leak detection system description:

Leak detection system

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Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Lined pit Monitor description:

Lined pit Monitor

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

Section 3 - Unlined

Would you like to utilize Unlined Pit PWD options? N

Produced Water Disposal (PWD) Location:

PWD disturbance (acres): PWD surface owner:

Other PWD Surface Owner Description:

Unlined pit PWD on or off channel:

Unlined pit PWD discharge volume (bbl/day):

Unlined pit

Precipitated solids disposal:

Decribe precipitated solids disposal:

Precipitated solids disposal

Unlined pit precipitated solids disposal schedule:

Unlined pit precipitated solids disposal schedule

Unlined pit reclamation description:

Unlined pit reclamation

Unlined pit Monitor description:

Unlined pit Monitor

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

Beneficial use user

Estimated depth of the shallowest aquifer (feet):

Precipitated Solids Permit

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

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

State

Unlined Produced Water Pit Estimated

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

Section 4 -

Would you like to utilize Injection PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

Other PWD Surface Owner Description:

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

Underground Injection Control (UIC) Permit?

UIC Permit

Section 5 - Surface

Would you like to utilize Surface Discharge PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

PWD disturbance (acres):

Injection well name:

Injection well API number:

Other PWD Surface Owner Description:

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:

Well Name: CHUCK SMITH MDP1 8_17 FED COM Well Number: 51H

Section 6 -

Would you like to utilize Other PWD options? N

Produced Water Disposal (PWD) Location:

PWD surface owner:

PWD disturbance (acres):

PWD Surface Owner Description:

Other PWD discharge volume (bbl/day):

Other PWD type description:

Other PWD type

Have other regulatory requirements been met?

Other regulatory requirements



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

Bond Info Data

06/02/2025

APD ID: 10400097548

Operator Name: OXY USA INCORPORATED

Well Name: CHUCK SMITH MDP1 8_17 FED COM

Well Type: OIL WELL

Submission Date: 03/20/2024

Highlighted data reflects the most recent changes

Show Final Text

Well Work Type: Drill

Bond

Federal/Indian APD: FED

BLM Bond number: ESB000226

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 amount:

Reclamation bond rider amount:

Additional reclamation bond information attachment:

Form 3160-3 FORM APPROVED OMB No. 1004-0137 (June 2015) Expires: January 31, 2018 **UNITED STATES** DEPARTMENT OF THE INTERIOR 5. Lease Serial No. NMNM142143 BUREAU OF LAND MANAGEMENT APPLICATION FOR PERMIT TO DRILL OR REENTER 6. If Indian, Allotee or Tribe Name 7. If Unit or CA Agreement, Name and No. ✓ DRILL REENTER 1a. Type of work: 1b. Type of Well: ✓ Oil Well Gas Well Other 8. Lease Name and Well No. 1c. Type of Completion: Hydraulic Fracturing Single Zone ✓ Multiple Zone CHUCK SMITH MDP1 8 17 FED COM 51H 2. Name of Operator 9. API Well No. **OXY USA INCORPORATED** 30-015-56967 3a. Address 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory P.O. BOX 1002, TUPMAN, CA 93276-1002 (661) 763-6046 WILLOW LAKE/BONE SPRING SOUTHE 4. Location of Well (Report location clearly and in accordance with any State requirements.*) 11. Sec., T. R. M. or Blk. and Survey or Area SEC 5/T24S/R31E/NMP At surface SESW / 1049 FSL / 1670 FWL / LAT 32.2419983 / LONG -103.8029755 At proposed prod. zone SWSW / 20 FSL / 800 FWL / LAT 32.2101247 / LONG -103.8058105 14. Distance in miles and direction from nearest town or post office* 12. County or Parish 13 State **EDDY** NM 15. Distance from proposed* 16. No of acres in lease 17. Spacing Unit dedicated to this well 1049 feet location to nearest property or lease line, ft. 640.0 (Also to nearest drig. unit line, if any) 18. Distance from proposed location* 19. Proposed Depth 20. BLM/BIA Bond No. in file to nearest well, drilling, completed, 30 feet 12100 feet / 22788 feet FED: ESB000226 applied for, on this lease, ft. 21. Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start* 23. Estimated duration 3467 feet 03/14/2025 45 days 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, and the Hydraulic Fracturing rule per 43 CFR 3162.3-3 (as applicable) 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see 2. A Drilling Plan. Item 20 above) 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification. 6. Such other site specific information and/or plans as may be requested by the SUPO must be filed with the appropriate Forest Service Office). 25. Signature Name (Printed/Typed) Date (Electronic Submission) MELISSA GUIDRY / Ph: (713) 366-5716 03/20/2024 Title Advisor Regulatory Sr. Approved by (Signature) Name (Printed/Typed) Date (Electronic Submission) CODY LAYTON / Ph: (575) 234-5959 05/30/2025 Title Office Assistant Field Manager Lands & Minerals Carlsbad Field Office 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)

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 I: 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 wen, 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 directionany 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.

ITEM 24: If the proposal will involve hydraulic fracturing operations, you must comply with 43 CFR 3162.3-3, including providing information about the protection of usable water. Operators should provide the best available information about all formations containing water and their depths. This information could include data and interpretation of resistivity logs run on nearby wells. Information may also be obtained from state or tribal regulatory agencies and from local BLM offices.

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 wen 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 win 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 conects this information to anow 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 Conection Clearance Officer (WO-630), 1849 C Street, N.W., Mail Stop 401 LS, Washington, D.C. 20240.

Additional Operator Remarks

Location of Well

0. SHL: SESW / 1049 FSL / 1670 FWL / TWSP: 24S / RANGE: 31E / SECTION: 5 / LAT: 32.2419983 / LONG: -103.8029755 (TVD: 0 feet, MD: 0 feet) PPP: NWNW / 0 FNL / 800 FWL / TWSP: 24S / RANGE: 31E / SECTION: 8 / LAT: 32.2391144 / LONG: -103.8057971 (TVD: 12035 feet, MD: 12226 feet) PPP: NWNW / 0 FNL / 800 FWL / TWSP: 24S / RANGE: 31E / SECTION: 17 / LAT: 32.2245917 / LONG: -103.805804 (TVD: 12100 feet, MD: 17525 feet) PPP: NWNW / 100 FNL / 800 FWL / TWSP: 24S / RANGE: 31E / SECTION: 8 / LAT: 32.2388395 / LONG: -103.8057977 (TVD: 12100 feet, MD: 12527 feet) PPP: SWSW / 1322 FSL / 800 FWL / TWSP: 24S / RANGE: 31E / SECTION: 8 / LAT: 32.2282259 / LONG: -103.8058024 (TVD: 12100 feet, MD: 16203 feet) BHL: SWSW / 20 FSL / 800 FWL / TWSP: 24S / RANGE: 31E / SECTION: 17 / LAT: 32.2101247 / LONG: -103.8058105 (TVD: 12100 feet, MD: 22788 feet)

BLM Point of Contact

Name: TENILLE C MOLINA Title: Land Law Examiner Phone: (575) 234-2224

Email: TCMOLINA@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.

		3/2025 2:29):54 PM		State of No	\	Agrica					Page 31	
<u>C-10</u>	<u>12</u>		En	ergy, Mir	nerals & Natu			s Departm	ent			Revised July 9, 2024	
	Electronical	ly		OIL (CONSERVA	TIC	ON DIV	ISION			✓ Initial Su	uhmittal	
Via OC	D Permitting									Submitt			
										Type:	☐ As Drille		
					WELL LOCA	ATIO	N INFOR	MATION					
API No 30-015	mber 5 -56967		Pool Code 98220			Poo	ol Name	PURP	LE SA	AGE,	, WOLF	CAMP	
Propert	y Code 334580		Property Na	ame CH	UCK SM	ITH	H MD	P1 8_	17 FEC	COI	Well Numb	er	
OGRII 16696			Operator Na	ame OX	Y USA	. 11	VC.				Ground Lev 3467'	vel Elevation	
Surface	Owner:	State □ Fee □	l Tribal 🗹 Fed	leral			Mineral	Owner: 🗆 S	State Fee	□ Tribal 🏻	☑ Federal		
					Sur	rface	Location						
UL	Section	Township	Range	Lot	Ft. from N/S		Ft. from	E/W	Latitude		Longitude	County	
N	5	24S	31E		1049' FS	SL	1670	' FWL	32.2419	99833	-103.80297557	EDDY	
					Botto	m Ho	ole Locatio	n		•			
UL	Section	Township	Range	Lot	Ft. from N/S		Ft. from		Latitude		Longitude	County	
M	17	24S	31E		20' FS	L	800	FWL	32.210	12472	-103.80581054	EDDY	
- "		T		T =		1				~ 41			
640	ted Acres	Infill or Defi	Well API	61	Overlapp N	ing Spacing	Unit (Y/N)	Consolid N/A	lation Code				
							-	no alza ana una	lar Camman		o: □Yes ☑No		
Older 1	Order Numbers. N/A						W CII SCIL	acks are une	ici Common	Ownership	o. 🗆 i es 🗷 i i o		
			1			Off P	Point (KO		ı	1			
UL N 1	Section	Township	Range	Lot	Ft. from N/S	\	Ft. from E/W Latitude 32.23993				Longitude	County	
M	5	24S	31E		300' FS				32.2398	33907	-103.80579526	EDDY	
111	G + i	T1:	D	T -4	First '	Take	Point (FT Ft. from		Latitude		T 14 4 -	Country	
D	Section 8	Township 24S	Range	Lot	100' FN	ш		FWL		2305/	Longitude -103.80579771	County	
	O	243	31E						32.2300	70004	-103.00379771	EDDI	
UL	Section	Township	Range	Lot	Ft. from N/S	таке	Point (LT Ft. from		Latitude	I	Longitude	County	
M	17	24S		201	100' FS	SI		FWL	32.2103	34463	-103.80581043		
141	M 17 24S 31E 100' F						000	. **					
Unitize N	Unitized Area or Area of Uniform Interest Spacing Unit Type N Spacing Unit Type H						Horizontal □ Vertical Ground Floor Elevation: 3467'						
	ONED A TOD GEDTIEVE A TYONG												
OPER.	OPERATOR CERTIFICATIONS						SURVEYOR CERTIFICATIONS						
my knov organize includin location interest,	I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and, if the well is a vertical or directional well, that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location or has a right to drill this well at this location pursuant to a contract with an owner of a working interest or unleased mineral interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.					su m				18 SURVI I hereby c shown on notes of a under my is true an		om field notes of actua nd correct to the best o	
If this well is a horizontal well, I further certify that this organization has received the consent of at least one lessee or owner of a working interest or unleased mineral interes in each tract (in the target pool or formation) in which any part of the well's completed interval will be located or obtained a compulsory pooling order from the division. Melissa Gudry 06/03/25						terest							

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

Certificate Number

Signature and Seal of Professional Surveyor

Date of Survey

May 25, 2023

melissa_guidry@oxy.com

Signature

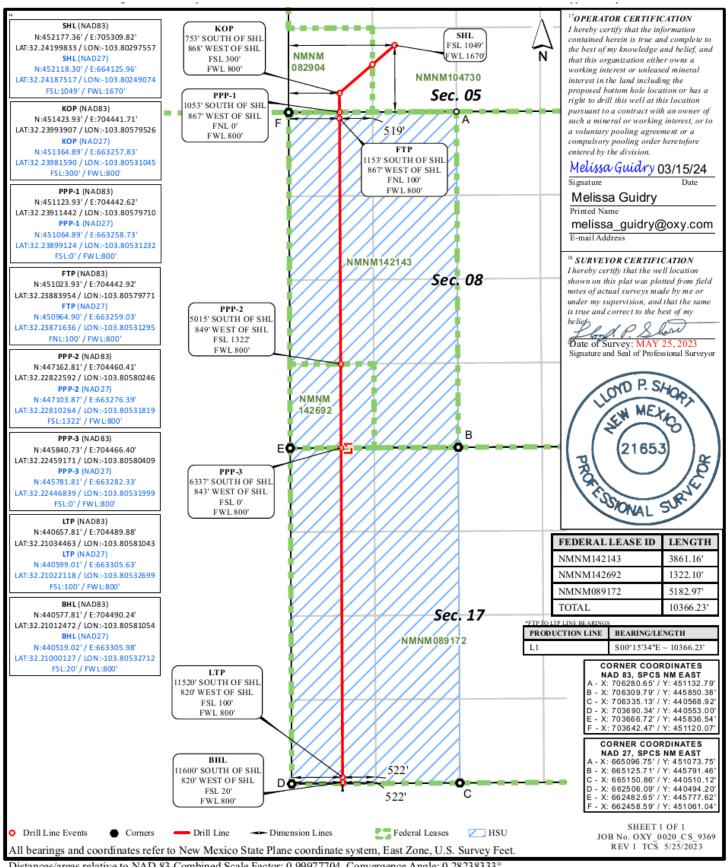
Printed Name

Email Address

Melissa Guidry

This grid represents a standard section. You may superimpose a non-standard section, or larger area, over this grid. Operators must outline the dedicated acreage in a red box, clearly show the well surface location and bottom hole location, if it is directionally drilled, with the dimensions from the section lines in the cardinal directions. If this is a horizontal wellbore show on this plat the location of the First Take Point and Last Take Point, and the point within the Completed interval (other than the First Take Point or Last Take Point) that is closest to any outer boundary of the tract.

Surveyors shall use the latest United States government survey or dependent resurvey. Well locations will be in reference to the New Mexico Principal Meridian. If the land is not surveyed, contact the OCD Engineering Bureau. Independent subdivision surveys will not be acceptable.



Page 5

State of New Mexico Energy, Minerals and Natural Resources Department

Submit Electronically Via E-permitting

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505

NATURAL GAS MANAGEMENT PLAN

This Natural Gas Manag	This Natural Gas Management Plan must be submitted with each Application for Permit to Drill (APD) for a new or recompleted well.												
	Section 1 – Plan Description Effective May 25, 2021												
I. Operator: OXY US	A INC.		OGRID: <u>16</u>	6696		Date: _	0 3/ 1	5/24					
II. Type: 🗹 Original 🛚	☐ Amendment	due to □ 19.15.27.	9.D(6)(a) NMA	C □ 19.15.27.9.D(6)(b) N	МАС □ О	ther.						
If Other, please describe	»:												
III. Well(s): Provide the be recompleted from a s					wells pro	oposed to l	be drille	ed or proposed to					
Well Name	API	ULSTR	Footages	Anticipated Oil BBL/D	1	cipated MCF/D		nticipated duced Water BBL/D					
SEE ATTACHED								22,2					
IV. Central Delivery P V. Anticipated Schedul proposed to be recomple	le: Provide the	following informat	tion for each nev	v or recompleted w	rell or se			9(D)(1) NMAC] d to be drilled or					
Well Name	API	Spud Date	TD Reached Date	Completion Commencement		Initial Fl Back Da	l l	First Production Date					
SEE ATTACHED													
VI. Separation Equipm VII. Operational Prac Subsection A through F VIII. Best Management during active and planner	tices: Attaction of 19.15.27.8 At Practices:	h a complete descr NMAC.	ription of the ac	tions Operator wil	l take to	comply v	vith the	requirements of					

Page 6

Section 2 – Enhanced Plan EFFECTIVE APRIL 1, 2022

Beginning April 1, 2022, an operator that is not in compliance with its statewide natural gas capture requirement for the applicable reporting area must complete this section.

☑ Operator certifies that it is not required to complete this section because Operator is in compliance with its statewide natural gas capture requirement for the applicable reporting area.

IX. Anticipated Natural Gas Production:

Well	API	Anticipated Average Natural Gas Rate MCF/D	Anticipated Volume of Natural Gas for the First Year MCF
X Natural Cas Gathering System (NO	ecs).		

X. Natural Gas Gathering System (NGGS):

Operator	System	ULSTR of Tie-in	Anticipated Gathering Start Date	Available Maximum Daily Capacity of System Segment Tie-in

XI. Map. \square Attach an accurate and legible map depicting the location of the well(s), the anticipated pipeline route(s) connecting the
production operations to the existing or planned interconnect of the natural gas gathering system(s), and the maximum daily capacity of
the segment or portion of the natural gas gathering system(s) to which the well(s) will be connected.

XII. Line Capacity. The natural gas gathering system \square will \square will not have capacity to gather 100% of the anticipated natu	ral gas
production volume from the well prior to the date of first production.	

XIII. Line	Pressure.	Operator	□ does □	does not	anticipate	that its ex	isting we	ll(s) conne	ected to	the same	segment	, or portio	n, of the
natural gas	gathering	system(s)	described a	above wil	1 continue	to meet an	nticipated	lincreases	in line	pressure c	aused by	y the new	well(s).

A 1	· •			1	•	1		1.
 Affach	(Inerator'	e nlan to	manage	nroduction	in rechange	to the	incressed	line pressure

XIV. C	Confidentiality: [☐ Operator a	sserts confid	entiality p	pursuant to	Section	71-2-8	NMSA	1978 f	or the	information	provided in
Section	2 as provided in	Paragraph (2)	of Subsectio	n D of 19	.15.27.9 NN	AAC, and	d attache	es a full	descrip	tion of	the specific	information
for whi	ich confidentiality	is asserted ar	nd the basis for	or such as	sertion.							

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Section 3 - Certifications Effective May 25, 2021

Operator certifies that, after reasonable inquiry and based on the available information at the time of submittal:

✓ Operator will be able to connect the well(s) to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system; or

□ Operator will not be able to connect to a natural gas gathering system in the general area with sufficient capacity to transport one hundred percent of the anticipated volume of natural gas produced from the well(s) commencing on the date of first production, taking into account the current and anticipated volumes of produced natural gas from other wells connected to the pipeline gathering system.

If Operator checks this box, Operator will select one of the following:

Well Shut-In. □ Operator will shut-in and not produce the well until it submits the certification required by Paragraph (4) of Subsection D of 19.15.27.9 NMAC; or

Venting and Flaring Plan. □ Operator has attached a venting and flaring plan that evaluates and selects one or more of the potential alternative beneficial uses for the natural gas until a natural gas gathering system is available, including:

- (a) power generation on lease;
- **(b)** power generation for grid;
- (c) compression on lease;
- (d) liquids removal on lease;
- (e) reinjection for underground storage;
- **(f)** reinjection for temporary storage;
- **(g)** reinjection for enhanced oil recovery;
- (h) fuel cell production; and
- (i) other alternative beneficial uses approved by the division.

Section 4 - Notices

- 1. If, at any time after Operator submits this Natural Gas Management Plan and before the well is spud:
- (a) Operator becomes aware that the natural gas gathering system it planned to connect the well(s) to has become unavailable or will not have capacity to transport one hundred percent of the production from the well(s), no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised venting and flaring plan containing the information specified in Paragraph (5) of Subsection D of 19.15.27.9 NMAC; or
- (b) Operator becomes aware that it has, cumulatively for the year, become out of compliance with its baseline natural gas capture rate or natural gas capture requirement, no later than 20 days after becoming aware of such information, Operator shall submit for OCD's approval a new or revised Natural Gas Management Plan for each well it plans to spud during the next 90 days containing the information specified in Paragraph (2) of Subsection D of 19.15.27.9 NMAC, and shall file an update for each Natural Gas Management Plan until Operator is back in compliance with its baseline natural gas capture rate or natural gas capture requirement.
- 2. OCD may deny or conditionally approve an APD if Operator does not make a certification, fails to submit an adequate venting and flaring plan which includes alternative beneficial uses for the anticipated volume of natural gas produced, or if OCD determines that Operator will not have adequate natural gas takeaway capacity at the time a well will be spud.

Page 8

I certify that, after reasonable inquiry, the statements in and attached to this Natural Gas Management Plan are true and correct to the best of my knowledge and acknowledge that a false statement may be subject to civil and criminal penalties under the Oil and Gas Act.

Signature: Melissa Guidry
Printed Name: MELISSA GUIDRY
Title: ADVISOR REGULATORY SR.
E-mail Address: MELISSA_GUIDRY@OXY.COM
Date: 03/15/2024
Phone: 713-497-2481
OIL CONSERVATION DIVISION
(Only applicable when submitted as a standalone form)
Approved By:
Title:
Approval Date:
Conditions of Approval:

III. Well(s)

Well Name	API	WELL LOCATION (ULSTR)	Footages	ANTICIPATED OIL BBL/D	ANTICIPATED GAS MCF/D	ANTICIPATED PROD WATER BBL/D
CHUCK SMITH MDP1 8-17 FEDERAL COM 51H	Pending	N-5-24S-31E	1049 FSL 1670 FWL	1100	9000	6000
CHUCK SMITH MDP1 8-17 FEDERAL COM 52H	Pending	N-5-24S-31E	1049 FSL 1700 FWL	1100	9000	6000

V. Anticipated Schedule

Well Name	API	Spud Date	TD Reached Date	Completion Commencement Date	Initial Flow Back Date	First Production Date
CHUCK SMITH MDP1 8-17 FEDERAL COM 51H	Pending	Jan-2026	Jan-2026	Apr-2026	May-2026	May-2026
CHUCK SMITH MDP1 8-17 FEDERAL COM 52H	Pending	Jan-2026	Jan-2026	Apr-2026	May-2026	May-2026

Central Delivery Point Name: Sand Dunes South Corridor 18 CTB

Part VI. Separation Equipment

Operator will size the flowback separator to handle 11,000 Bbls of fluid and 6-10MMscfd which is more than the expected peak rates for these wells. Each separator is rated to 1440psig, and pressure control valves and automated communication will cause the wells to shut in in the event of an upset at the facility, therefore no gas will be flared on pad during an upset. Current Oxy practices avoid use of flare or venting on pad, therefore if there is an upset or emergency condition at the facility, the wells will immediately shut down, and reassume production once the condition has cleared.

VII. Operational Practices

Gathering System and Pipeline Notification

Well(s) will be connected to a production facility after flowback operations are complete, where a gas transporter system is in place. The gas produced from production facility is dedicated to Enterprise Field Services, LLC ("Enterprise") and is connected to Enterprise low/high pressure gathering system located in Eddy County, New Mexico. OXY USA INC. ("OXY") provides (periodically) to Enterprise a drilling, completion and estimated first production date for wells that are scheduled to be drilled in the foreseeable future. In addition, OXY and Enterprise have periodic conference calls to discuss changes to drilling and completion schedules. Gas from these wells will be processed at Enterprise's Processing Plant located in Sec. 36, Twn. 24S, Rng. 30E, Eddy County, New Mexico. The actual flow of the gas will be based on compression operating parameters and gathering system pressures.

Flowback Strategy

After the fracture treatment/completion operations, well(s) will be produced to temporary production tanks and gas will be flared or vented. During flowback, the fluids and sand content will be monitored. When the produced fluids contain minimal sand, the wells will be turned to production facilities. Gas sales should start as soon as the wells start flowing through the production facilities, unless there are operational issues on Enterprise system at that time. Based on current information, it is OXY's belief the system can take this gas upon completion of the well(s).

Safety requirements during cleanout operations from the use of underbalanced air cleanout systems may necessitate that sand and non-pipeline quality gas be vented and/or flared rather than sold on a temporary basis.

VIII. Best Management Practices

Alternatives to Reduce Flaring

Below are alternatives considered from a conceptual standpoint to reduce the amount of gas flared.

Power Generation – On lease

Only a portion of gas is consumed operating the generator, remainder of gas will be flared

Compressed Natural Gas - On lease

Gas flared would be minimal, but might be uneconomical to operate when gas volume declines

NGL Removal - On lease

Plants are expensive, residue gas is still flared, and uneconomical to operate when gas volume declines

Oxy USA Inc. - CHUCK SMITH MDP1 8_17 FED COM 51H Drill Plan

1. Geologic Formations

TVD of Target (ft):	12100	Pilot Hole Depth (ft):	
Total Measured Depth (ft):	22788	Deepest Expected Fresh Water (ft):	607

Delaware Basin

Formation	MD-RKB (ft)	TVD-RKB (ft)	Expected Fluids
Rustler	607	607	
Salado	969	969	Salt
Castile	2814	2814	Salt
Delaware	4222	4222	Oil/Gas/Brine
Bell Canyon	4244	4244	Oil/Gas/Brine
Cherry Canyon	5209	5209	Oil/Gas/Brine
Brushy Canyon	6438	6422	Losses
Bone Spring	8139	8097	Oil/Gas
Bone Spring 1st	9187	9129	Oil/Gas
Bone Spring 2nd	9852	9784	Oil/Gas
Bone Spring 3rd	11118	11031	Oil/Gas
Wolfcamp	11577	11483	Oil/Gas
Penn			Oil/Gas
Strawn			Oil/Gas

^{*}H2S, water flows, loss of circulation, abnormal pressures, etc.

2. Casing Program

		N	ID	TVD					
	Hole	From	То	From	То	Csg.	Csg Wt.		
Section	Size (in)	(ft)	(ft)	(ft)	(ft)	OD (in)	(ppf)	Grade	Conn.
Surface	17.5	0	909	0	909	13.375	54.5	J-55	BTC
Intermediate	12.25	0	11596	0	11500	9.625	40	L-80 HC	ВТС
Production	8.75	0	12146	0	11850	7	32	P-110	Wedge 461
Production	8.5	12146	22788	11850	12100	5.5	20	P-110	Wedge 461

All casing strings will be tested in accordance with 43 CFR part 3170 Subpart 3172

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All Casing SF Values will meet or exceed						
those below						
SF	SF SF Body SF Joint S					
Collapse	Burst	Tension	Tension			
1.00 1.100 1.4 1.4						

Annular Clearance Variance Request

As per the agreement reached in the Oxy/BLM face-to-face meeting on Feb 22, 2018, Oxy requests permission to allow deviation from the 0.422" annular clearance requirement. Please see Annular Clearance Variance attachment for further details.

	Y or N
Is casing new? If used, attach certification as required in 43 CFR 3160	Y
Does casing meet API specifications? If no, attach casing specification sheet.	Y
Is premium or uncommon casing planned? If yes attach casing specification sheet.	Y
Does the above casing design meet or exceed BLM's minimum standards?	Y
If not provide justification (loading assumptions, casing design criteria).	Y
Will the intermediate pipe be kept at a minimum 1/3 fluid filled to avoid approaching	Y
the collapse pressure rating of the casing?	Y
Is well located within Capitan Reef?	N
If yes, does production casing cement tie back a minimum of 50' above the Reef?	
Is well within the designated 4 string boundary.	
Is well located in SOPA but not in R-111-P?	Y
If yes, are the first 2 strings cemented to surface and 3 rd string cement tied back	37
500' into previous casing?	Y
Is well located in R-111-P and SOPA?	N
If yes, are the first three strings cemented to surface?	
Is 2 nd string set 100' to 600' below the base of salt?	
Is well located in high Cave/Karst?	N
If yes, are there two strings cemented to surface?	
(For 2 string wells) If yes, is there a contingency casing if lost circulation occurs?	
Is well located in critical Cave/Karst?	N
If yes, are there three strings cemented to surface?	

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3. Cementing Program

Section	Stage	Slurry:	Sacks	Yield (ft^3/ft)	Density (lb/gal)	Excess:	тос	Placement	Description
Surface	1	Surface - Tail	950	1.33	14.8	100%	-	Circulate	Class C+Accel.
Int.	1	Intermediate 1S - Tail	978	1.65	13.2	5%	6,688	Circulate	Class H+Accel., Disper., Salt
Int.	2	Intermediate 2S - Tail BH	1516	1.71	13.3	25%	-	Bradenhead	Class C+Accel.
Prod.	1	Production - Tail	2567	1.38	13.2	25%	11,096	Circulate	Class H+Ret., Disper., Salt

Offline Cementing Request

Oxy requests a variance to cement the 9.625" and/or 7.625" intermediate casing strings offline in accordance to the approved variance, EC Tran 461365. Please see Offline Cementing Variance attachment for further details.

Bradenhead CBL Request

Oxy requests permission to adjust the CBL requirement after bradenhead cement jobs, on 7-5/8" intermediate casings, as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see Bradenhead CBL Variance attachment for further details.

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4. Pressure Control Equipment

BOP installed and		Min.					Deepest TVD
tested before drilling	Size?	Required		Type	✓	Tested to:	Depth (ft) per
which hole?		WP					Section:
		5M		Annular	✓	70% of working pressure	
				Blind Ram	\		
12.25" Hole	13-5/8"	5M		Pipe Ram		250 poi / 5000 poi	11500
		SIVI	Double Ram		✓	250 psi / 5000 psi	
			Other*				
		5M		Annular	✓	100% of working pressure	
				Blind Ram			
8.75" Hole 13-	13-5/8"	10M		Pipe Ram		250 poi / 10000 poi	12100
				Double Ram		250 psi / 10000 psi	
			Other*				

BOP/BOPE will be tested by an independent service company to 250 psi low and the high pressure indicated above per 43 CFR part 3170 Subpart 3172 requirements. The System may be upgraded to a higher pressure but still tested to the working pressure listed in the table above. 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. Other accessories to the BOP equipment will include a Kelly cock and floor safety valve (inside BOP) and choke lines and choke manifold.

5M Annular BOP Request

Per BLM's Memorandum No. NM-2017-008: *Decision and Rationale for a Variance Allowing the Use of a 5M Annular Preventer with a 10M BOP Stack*, Oxy requests to employ a 5M annular with a 10M BOPE stack in the pilot and lateral sections of the well and will ensure that two barriers to flow are maintained at all times. Please see Annular BOP Variance attachment for further details.

^{*}Specify if additional ram is utilized

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Formation integrity test will be performed per 43 CFR part 3170 Subpart 3172.

On Exploratory wells or on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Will be tested in accordance with 43 CFR part 3170 Subpart 3172.

A variance is requested for the use of a flexible choke line from the BOP to Choke Manifold. See attached for specs and hydrostatic test chart.

Are anchors required by manufacturer?

A multibowl or a unionized multibowl wellhead system will be employed. The wellhead and connection to the BOPE will meet all API 6A requirements. The BOP will be tested per 43 CFR part 3170 Subpart 3172 after installation on the surface casing which will cover testing requirements for a maximum of 30 days. If any seal subject to test pressure is broken the system must be tested. We will test the flange connection of the wellhead with a test port that is directly in the flange. We are proposing that we will run the wellhead through the rotary prior to cementing surface casing as discussed with the BLM on October 8, 2015.

See attached schematics.

BOP Break Testing Request

Oxy requests permission to adjust the BOP break testing requirements as per the agreement reached in the OXY/BLM meeting on September 5, 2019. Please see BOP Break Testing Variance attachment for further details.

Oxy will use Cameron ADAPT wellhead system that uses an OEC top flange connection. This connection has been fully vetted and verified by API to Spec 6A and carries an API monogram.

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5. Mud Program

Section	Depth -	- MD	Depth -	TVD	Tema	Weight	Viscosity	Water
Section	From (ft)	To (ft)	From (ft)	To (ft)	Туре	(ppg)	Viscosity	Loss
Surface	0	909	0	909	Water-Based Mud	8.6 - 8.8	40-60	N/C
Intermediate	909	11596	909	11500	Saturated Brine-Based or Oil-Based Mud	8.0 - 10.0	35-45	N/C
Production	11596	22788	11500	12100	Water-Based or Oil- Based Mud	9.5 - 13.5	38-50	N/C

Sufficient mud materials to maintain mud properties and meet minimum lost circulation and weight increase requirements will be kept on location at all times. The following is a general list of products: Barite, Bentonite, Gypsum, Lime, Soda Ash, Caustic Soda, Nut Plug, Cedar Fiber, Cotton Seed Hulls, Drilling Paper, Salt Water Clay, CACL2. Oxy will use a closed mud system.

What will be used to monitor the loss or gain of fluid?	PVT/MD Totco/Visual Monitoring
---------------------------------------------------------	--------------------------------

6. Logging and Testing Procedures

Loggi	ng, Coring and Testing.				
Yes Will run GR from TD to surface (horizontal well – vertical portion of hole).					
1 68	Stated logs run will be in the Completion Report and submitted to the BLM.				
No	Logs are planned based on well control or offset log information.				
No	Drill stem test? If yes, explain				
No	Coring? If yes, explain				

Addit	ional logs planned	Interval
No	Resistivity	
No	Density	
Yes	CBL	Production string
Yes	Mud log	Bone Spring – TD
No	PEX	

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7. Drilling Conditions

Condition	Specify what type and where?				
BH Pressure at deepest TVD	8495 psi				
Abnormal Temperature	No				
BH Temperature at deepest TVD	177°F				

Pump high viscosity sweeps as needed for hole cleaning. The mud system will be monitored visually/manually as well as with an electronic PVT. The necessary mud products for additional weight and fluid loss control will be on location at all times. Appropriately weighted mud will be used to isolate potential gas, oil, and water zones until such time as casing can be cemented into place for zonal

Hydrogen Sulfide (H2S) monitors will be installed prior to drilling out the surface shoe. If H2S is detected in concentrations greater than 100 ppm, the operator will comply with the provisions of 43 CFR part 3170 Subpart 3172. If Hydrogen Sulfide is encountered, measured values and formations will be provided to the BLM.

tile bt	LIVI.
Ν	H2S is present
Υ	H2S Plan attached

8. Other facets of operation

	Yes/No
Will the well be drilled with a walking/skidding operation? If yes, describe.	
We plan to drill the 2 well pad in batch by section: all surface sections, intermediate	Yes
sections and production sections. The wellhead will be secured with a night cap whenever	1 68
the rig is not over the well.	
Will more than one drilling rig be used for drilling operations? If yes, describe.	
Oxy requests the option to contract a Surface Rig to drill, set surface casing, and cement for	
this well. If the timing between rigs is such that Oxy would not be able to preset surface,	Yes
the Primary Rig will MIRU and drill the well in its entirety per the APD. Please see the	
attached document for information on the spudder rig.	

Total Estimated Cuttings Volume: 1779 bbls

PRD NM DIRECTIONAL PLANS (NAD 1983) Chuck Smith MDP1 8_17 Chuck Smith MDP1 8_17 Fed Com 51H

Wellbore #1

Plan: Permitting Plan

Standard Planning Report

19 March, 2024

Planning Report

HOPSPP Database:

Company: **ENGINEERING DESIGNS**

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Chuck Smith MDP1 8_17

Well: Chuck Smith MDP1 8_17 Fed Com 51H

Wellbore: Wellbore #1 Design: Permitting Plan Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference:

Survey Calculation Method:

Well Chuck Smith MDP1 8_17 Fed Com 51H

RKB = 25' @ 3492.00ft RKB = 25' @ 3492.00ft

Grid

Minimum Curvature

Project PRD NM DIRECTIONAL PLANS (NAD 1983)

Map System: US State Plane 1983

North American Datum 1983 Geo Datum: Map Zone: New Mexico Eastern Zone

System Datum: Mean Sea Level

Using geodetic scale factor

59.78

47,463.50000000

Site Chuck Smith MDP1 8_17

Site Position: Northing: 450,665.22 usft Latitude: 32.237835 From: Мар Easting: 705,784.47 usft Longitude: -103.801465

Position Uncertainty: 0.89 ft Slot Radius: 13.200 in

Well Chuck Smith MDP1 8_17 Fed Com 51H

HDGM FILE

Well Position +N/-S 0.00 ft 452.177.36 usf Latitude: 32.241998 Northing: 705,309.82 usf +E/-W 0.00 ft Easting: Longitude: -103.802976 **Position Uncertainty** 2.00 ft Wellhead Elevation: ft **Ground Level:** 3,467.00 ft

Grid Convergence: 0.28°

0.00

Wellbore Wellbore #1 **Model Name** Declination Field Strength Magnetics Sample Date Dip Angle (°) (nT)

6.37

Design Permitting Plan Audit Notes: Version: Phase: **PROTOTYPE** Tie On Depth: 0.00 Vertical Section: Depth From (TVD) +N/-S +E/-W Direction (ft) (ft) (ft) (°) 0.00 0.00 0.00 184.04

Plan Survey Tool Program Depth From Depth To (ft) (ft) Remarks **Tool Name**

Date 3/19/2024

22,788.01 Permitting Plan (Wellbore #1)

Survey (Wellbore)

11/21/2023

B005Mc_MWD+HRGM+SA MWD+HRGM+Sag+MSA

Plan Sections										
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,030.00	0.00	0.00	5,030.00	0.00	0.00	0.00	0.00	0.00	0.00	
5,529.90	10.00	226.25	5,527.37	-30.09	-31.43	2.00	2.00	0.00	226.25	
11,695.75	10.00	226.25	11,599.58	-770.36	-804.69	0.00	0.00	0.00	0.00	
12,527.12	90.00	179.74	12,100.00	-1,339.50	-866.11	10.00	9.62	-5.59	-46.95	
22,788.01	90.00	179.74	12,100.00	-11,600.27	-819.63	0.00	0.00	0.00	0.00 F	BHL (Chuck Smith

Planning Report

Database: Company: Project:

Site:

HOPSPP

ENGINEERING DESIGNS

PRD NM DIRECTIONAL PLANS (NAD 1983)

Chuck Smith MDP1 8_17

Well: Chuck Smith MDP1 8_17 Fed Com 51H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well Chuck Smith MDP1 8_17 Fed Com 51H

RKB = 25' @ 3492.00ft

Grid

Minimum Curvature

RKB = 25' @ 3492.00ft

nned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00 300.00	0.00 0.00	0.00 0.00	200.00 300.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00
600.00 607.00	0.00 0.00	0.00 0.00	600.00 607.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
	0.00	0.00	607.00	0.00	0.00	0.00	0.00	0.00	0.00
RUSTLER 700.00	0.00	0.00	700.00	0.00	0.00	0.00	0.00	0.00	0.00
800.00	0.00	0.00	800.00	0.00	0.00	0.00	0.00	0.00	0.00
900.00	0.00	0.00	900.00	0.00	0.00	0.00	0.00	0.00	0.00
969.00	0.00	0.00	969.00	0.00	0.00	0.00	0.00	0.00	0.00
SALADO	0.00	0.00	4 000 00	2.22	0.00	2.22	2.22	2.22	0.00
1,000.00	0.00	0.00	1,000.00	0.00	0.00	0.00	0.00	0.00	0.00
1,100.00 1,200.00	0.00 0.00	0.00 0.00	1,100.00 1,200.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
1,300.00	0.00	0.00	1,300.00	0.00	0.00	0.00	0.00	0.00	0.00
1,400.00	0.00	0.00	1,400.00	0.00	0.00	0.00	0.00	0.00	0.00
1,500.00	0.00	0.00	1,500.00	0.00	0.00	0.00	0.00	0.00	0.00
1,600.00 1,700.00	0.00 0.00	0.00 0.00	1,600.00 1,700.00	0.00 0.00	0.00	0.00	0.00 0.00	0.00 0.00	0.00 0.00
1,700.00					0.00	0.00			
1,800.00	0.00	0.00	1,800.00	0.00	0.00	0.00	0.00	0.00	0.00
1,900.00	0.00	0.00	1,900.00	0.00	0.00	0.00	0.00	0.00	0.00
2,000.00	0.00	0.00	2,000.00	0.00	0.00	0.00	0.00	0.00	0.00
2,100.00	0.00	0.00	2,100.00	0.00	0.00	0.00	0.00	0.00	0.00
2,200.00	0.00	0.00	2,200.00	0.00	0.00	0.00	0.00	0.00	0.00
2,300.00	0.00	0.00	2,300.00	0.00	0.00	0.00	0.00	0.00	0.00
2,400.00	0.00	0.00	2,400.00	0.00	0.00	0.00	0.00	0.00	0.00
2,500.00 2,600.00	0.00 0.00	0.00 0.00	2,500.00 2,600.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
2,700.00	0.00	0.00	2,700.00	0.00	0.00	0.00	0.00	0.00	0.00
2,800.00	0.00	0.00	2,800.00	0.00	0.00	0.00	0.00	0.00	0.00
2,814.00	0.00	0.00	2,814.00	0.00	0.00	0.00	0.00	0.00	0.00
CASTILE	0.00	0.00	2 000 00	0.00	0.00	0.00	0.00	0.00	0.00
2,900.00 3,000.00	0.00 0.00	0.00 0.00	2,900.00 3.000.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
3,100.00	0.00	0.00	3,100.00	0.00	0.00	0.00	0.00	0.00	0.00
,									
3,200.00	0.00	0.00	3,200.00	0.00	0.00	0.00	0.00	0.00	0.00
3,300.00 3,400.00	0.00 0.00	0.00 0.00	3,300.00 3,400.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
3,500.00	0.00	0.00	3,500.00	0.00	0.00	0.00	0.00	0.00	0.00
3,600.00	0.00	0.00	3,600.00	0.00	0.00	0.00	0.00	0.00	0.00
3,700.00 3,800.00	0.00 0.00	0.00 0.00	3,700.00 3,800.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
3,800.00	0.00	0.00	3,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,000.00	0.00	0.00	4,000.00	0.00	0.00	0.00	0.00	0.00	0.00
4,100.00	0.00	0.00	4,100.00	0.00	0.00	0.00	0.00	0.00	0.00
4,200.00 4,222.00	0.00 0.00	0.00 0.00	4,200.00 4,222.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00
	0.00	0.00	4,222.00	0.00	0.00	0.00	0.00	0.00	0.00
DELAWARE 4,244.00	0.00	0.00	4,244.00	0.00	0.00	0.00	0.00	0.00	0.00
,		0.00	4,244.00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00		0.00	4 300 00	0.00	0.00	0.00	0.00	0.00	0.00
4,300.00	0.00 0.00	0.00 0.00	4,300.00 4,400.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00	0.00 0.00

Planning Report

Database: Company:

Site:

HOPSPP

ENGINEERING DESIGNS

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Chuck Smith MDP1 8_17

Well: Chuck Smith MDP1 8_17 Fed Com 51H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well Chuck Smith MDP1 8_17 Fed Com 51H

RKB = 25' @ 3492.00ft RKB = 25' @ 3492.00ft

Grid

Minimum Curvature

Design:	Permitting Pla	an							
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
4,500.00	0.00	0.00	4,500.00	0.00	0.00	0.00	0.00	0.00	0.00
4,600.00	0.00	0.00	4,600.00	0.00	0.00	0.00	0.00	0.00	0.00
4,700.00	0.00	0.00	4,700.00	0.00	0.00	0.00	0.00	0.00	0.00
4,800.00	0.00	0.00	4,800.00	0.00	0.00	0.00	0.00	0.00	0.00
4,900.00	0.00	0.00	4,900.00	0.00	0.00	0.00	0.00	0.00	0.00
5,000.00	0.00	0.00	5,000.00	0.00	0.00	0.00	0.00	0.00	0.00
5,030.00	0.00	0.00	5,030.00	0.00	0.00	0.00	0.00	0.00	0.00
Build 2°/100	1								
5,100.00	1.40	226.25	5,099.99	-0.59	-0.62	0.63	2.00	2.00	0.00
5,200.00	3.40	226.25	5,199.90	-3.49	-3.64	3.74	2.00	2.00	0.00
5,209.12	3.58	226.25	5,209.00	-3.87	-4.04	4.15	2.00	2.00	0.00
CHERRY CA	NYON								
5,300.00	5.40	226.25	5,299.60	-8.79	-9.18	9.42	2.00	2.00	0.00
5,400.00	7.40	226.25	5,398.97	-16.50	-17.24	17.67	2.00	2.00	0.00
5,500.00	9.40	226.25	5,497.89	-26.60	-27.79	28.49	2.00	2.00	0.00
5,529.90	10.00	226.25	5,527.37	-30.09	-31.43	32.23	2.00	2.00	0.00
Hold 10° Tar	•								
5,600.00	10.00	226.25	5,596.40	-38.50	-40.22	41.24	0.00	0.00	0.00
5,700.00	10.00	226.25	5,694.88	-50.51	-52.76	54.10	0.00	0.00	0.00
5,800.00	10.00	226.25	5,793.37	-62.51	-65.30	66.96	0.00	0.00	0.00
5,900.00	10.00	226.25	5,891.85	-74.52	-77.84	79.82	0.00	0.00	0.00
6,000.00	10.00	226.25	5,990.33	-86.53	-90.38	92.68	0.00	0.00	0.00
6,100.00	10.00	226.25	6,088.81	-98.53	-102.92	105.54	0.00	0.00	0.00
6,200.00	10.00	226.25	6,187.29	-110.54	-115.46	118.40	0.00	0.00	0.00
6,300.00	10.00	226.25	6,285.77	-122.54	-128.00	131.26	0.00	0.00	0.00
6,400.00	10.00	226.25	6,384.25	-134.55	-140.55	144.12	0.00	0.00	0.00
6,438.33	10.00	226.25	6,422.00	-139.15	-145.35	149.05	0.00	0.00	0.00
BRUSHY CA		220.20	0,122.00				0.00	0.00	0.00
6,500.00	10.00	226.25	6,482.73	-146.56	-153.09	156.98	0.00	0.00	0.00
6,600.00	10.00	226.25	6,581.22	-158.56	-165.63	169.84	0.00	0.00	0.00
6,700.00	10.00	226.25	6,679.70	-170.57	-178.17	182.70	0.00	0.00	0.00
6,800.00	10.00	226.25	6,778.18	-182.57	-190.71	195.56	0.00	0.00	0.00
6,900.00	10.00	226.25	6,876.66	-194.58	-203.25	208.42	0.00	0.00	0.00
7,000.00	10.00	226.25	6,975.14	-206.59	-215.79	221.28	0.00	0.00	0.00
7,100.00	10.00	226.25	7,073.62	-218.59	-228.33	234.14	0.00	0.00	0.00
7,200.00	10.00	226.25	7,172.10	-230.60	-240.87	247.00	0.00	0.00	0.00
7,300.00	10.00	226.25	7,270.59	-242.60	-253.41	259.86	0.00	0.00	0.00
7,400.00	10.00	226.25	7,369.07	-254.61	-265.96	272.72	0.00	0.00	0.00
7,500.00	10.00	226.25	7,467.55	-266.62	-278.50	285.58	0.00	0.00	0.00
7,600.00 7,700.00 7,800.00 7,900.00 8,000.00	10.00 10.00 10.00 10.00 10.00	226.25 226.25 226.25 226.25 226.25 226.25	7,566.03 7,664.51 7,762.99 7,861.47 7,959.96	-278.62 -290.63 -302.63 -314.64 -326.65	-270.30 -291.04 -303.58 -316.12 -328.66 -341.20	298.44 311.30 324.16 337.02 349.88	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00 0.00
8,100.00	10.00	226.25	8,058.44	-338.65	-353.74	362.74	0.00	0.00	0.00
8,139.16	10.00	226.25	8,097.00	-343.35	-358.65	367.78	0.00	0.00	0.00
8,200.00	NG 10.00	226.25	8,156.92	-350.66	-366.28	375.60	0.00	0.00	0.00
8,300.00 8,400.00	10.00 10.00 10.00	226.25 226.25 226.25	8,255.40 8,353.88	-362.66 -374.67	-378.83 -391.37	388.46 401.32	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
8,500.00	10.00	226.25	8,452.36	-386.68	-403.91	414.18	0.00	0.00	0.00
8,600.00	10.00	226.25	8,550.84	-398.68	-416.45	427.04	0.00	0.00	0.00
8,700.00	10.00	226.25	8,649.32	-410.69	-428.99	439.90	0.00	0.00	0.00
8,800.00	10.00	226.25	8,747.81	-422.69	-441.53	452.76	0.00	0.00	0.00

Planning Report

Database: Company: Project:

Site:

HOPSPP

ENGINEERING DESIGNS

PRD NM DIRECTIONAL PLANS (NAD 1983)

Chuck Smith MDP1 8_17

Well: Chuck Smith MDP1 8_17 Fed Com 51H

Wellbore: Wellbore #1

Design: Permitting Plan

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Survey Calculation Method:

Well Chuck Smith MDP1 8_17 Fed Com 51H

RKB = 25' @ 3492.00ft

RKB = 25' @ 3492.00ft Grid

Minimum Curvature

Design: Permitting Plan										
Planned	l Survey									
ı	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
	8,900.00	10.00	226.25	8,846.29	-434.70	-454.07	465.62	0.00	0.00	0.00
	9,000.00 9,100.00 9,187.07 BONE SPRI	10.00 10.00 10.00	226.25 226.25 226.25	8,944.77 9,043.25 9,129.00	-446.71 -458.71 -469.17	-466.61 -479.15 -490.07	478.48 491.34 502.54	0.00 0.00 0.00	0.00 0.00 0.00	0.00 0.00 0.00
	9,200.00	10.00	226.25	9,141.73	-470.72	-491.69	504.20	0.00	0.00	0.00
	9,300.00	10.00	226.25	9,240.21	-482.72	-504.24	517.06	0.00	0.00	0.00
	9,400.00 9,500.00 9,600.00 9,700.00 9,800.00 9,852.17	10.00 10.00 10.00 10.00 10.00	226.25 226.25 226.25 226.25 226.25 226.25	9,338.69 9,437.18 9,535.66 9,634.14 9,732.62 9,784.00	-494.73 -506.74 -518.74 -530.75 -542.75 -549.02	-516.78 -529.32 -541.86 -554.40 -566.94 -573.48	529.92 542.78 555.64 568.50 581.36 588.07	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	BONE SPRI		220.20	0,701.00	010.02	070.10	000.07	0.00	0.00	
	9,900.00 10,000.00 10,100.00 10,200.00	10.00 10.00 10.00 10.00	226.25 226.25 226.25 226.25	9,831.10 9,929.58 10,028.06 10,126.54	-554.76 -566.77 -578.77 -590.78	-579.48 -592.02 -604.56 -617.10	594.22 607.08 619.94 632.80	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00
	10,300.00 10,400.00 10,500.00 10,600.00 10,700.00	10.00 10.00 10.00 10.00 10.00	226.25 226.25 226.25 226.25 226.25	10,225.03 10,323.51 10,421.99 10,520.47 10,618.95	-602.78 -614.79 -626.80 -638.80 -650.81	-629.65 -642.19 -654.73 -667.27 -679.81	645.66 658.52 671.38 684.24 697.10	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	10,800.00 10,900.00 11,000.00 11,100.00 11,118.40	10.00 10.00 10.00 10.00 10.00	226.25 226.25 226.25 226.25 226.25	10,717.43 10,815.91 10,914.40 11,012.88 11,031.00	-662.81 -674.82 -686.83 -698.83 -701.04	-692.35 -704.89 -717.43 -729.97 -732.28	709.96 722.82 735.68 748.54 750.91	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	BONE SPRI			,						0.00
	11,200.00 11,300.00 11,400.00 11,500.00 11,577.37	10.00 10.00 10.00 10.00 10.00	226.25 226.25 226.25 226.25 226.25	11,111.36 11,209.84 11,308.32 11,406.80 11,483.00	-710.84 -722.84 -734.85 -746.86 -756.15	-742.52 -755.06 -767.60 -780.14 -789.84	761.40 774.26 787.12 799.98 809.93	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00	0.00 0.00 0.00 0.00 0.00
	WOLFCAME									
	11,600.00 11,695.75	10.00 10.00	226.25 226.25	11,505.28 11,599.58	-758.86 -770.36	-792.68 -804.69	812.84 825.16	0.00 0.00	0.00 0.00	0.00 0.00
	11,700.00 11,755.56	10.29 14.74	224.51 208.83	11,603.76 11,658.00	-770.88 -780.62	-805.22 -812.11	825.72 835.92	10.00 10.00	6.94 8.00	-40.90 -28.22
	WOLFCAMF 11,800.00	18.72	201.92	11,700.56	-792.20	-817.50	847.84	10.00	8.96	-15.56
	11,900.00 12,000.00 12,100.00 12,200.00 12,300.00	28.17 37.89 47.71 57.58 67.48	193.56 189.20 186.42 184.40 182.78	11,792.23 11,875.97 11,949.26 12,009.86 12,055.93	-830.13 -883.52 -950.76 -1,029.81 -1,118.25	-829.06 -839.52 -848.59 -855.99 -861.48	886.49 940.50 1,008.21 1,087.58 1,176.19	10.00 10.00 10.00 10.00 10.00	9.45 9.72 9.82 9.87 9.90	-8.36 -4.36 -2.78 -2.02 -1.62
	12,400.00 12,500.00 12,527.12	77.39 87.31 90.00	181.38 180.08 179.74	12,086.07 12,099.36 12,100.00	-1,213.40 -1,312.38 -1,339.50	-864.90 -866.15 -866.11	1,271.35 1,370.16 1,397.21	10.00 10.00 10.00	9.91 9.92 9.92	-1.40 -1.29 -1.27
	Landing Poi 12,600.00 12,700.00	90.00 90.00	179.74 179.74	12,100.00 12,100.00	-1,412.37 -1,512.37	-865.78 -865.33	1,469.88 1,569.60	0.00 0.00	0.00 0.00	0.00 0.00
	12,800.00	90.00	179.74	12,100.00	-1,612.37	-864.88	1,669.32	0.00	0.00	0.00

Planning Report

Database: Company: Project:

Site:

HOPSPP

ENGINEERING DESIGNS

PRD NM DIRECTIONAL PLANS (NAD 1983)

Chuck Smith MDP1 8_17

Well: Chuck Smith MDP1 8_17 Fed Com 51H

Wellbore: Wellbore #1

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Survey Calculation Method:

Well Chuck Smith MDP1 8_17 Fed Com 51H

RKB = 25' @ 3492.00ft

Grid

Minimum Curvature

RKB = 25' @ 3492.00ft

velibore: Design:	Permitting Pla	an							
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
12,900.00	90.00	179.74	12,100.00	-1,712.37	-864.42	1,769.03	0.00	0.00	0.00
13,000.00	90.00	179.74	12,100.00	-1,812.37	-863.97	1,868.75	0.00	0.00	0.00
13,100.00	90.00	179.74	12,100.00	-1,912.37	-863.52	1,968.47	0.00	0.00	0.00
13,200.00	90.00	179.74	12,100.00	-2,012.36	-863.06	2,068.19	0.00	0.00	0.00
13,300.00	90.00	179.74	12,100.00	-2,112.36	-862.61	2,167.91	0.00	0.00	0.00
13,400.00	90.00	179.74	12,100.00	-2,212.36	-862.16	2,267.63	0.00	0.00	0.00
13,500.00	90.00	179.74	12,100.00	-2,312.36	-861.70	2,367.34	0.00	0.00	0.00
13,600.00	90.00	179.74	12,100.00	-2,412.36	-861.25	2,467.06	0.00	0.00	0.00
13,700.00	90.00	179.74	12,100.00	-2,512.36	-860.80	2,566.78	0.00	0.00	0.00
13,800.00	90.00	179.74	12,100.00	-2,612.36	-860.35	2,666.50	0.00	0.00	0.00
13,900.00	90.00	179.74	12,100.00	-2,712.36	-859.89	2,766.22	0.00	0.00	0.00
14,000.00	90.00	179.74	12,100.00	-2,812.36	-859.44	2,865.94	0.00	0.00	0.00
14,100.00 14,200.00	90.00 90.00	179.74 179.74	12,100.00 12,100.00	-2,912.36 -3,012.35	-858.99 -858.53	2,965.65 3,065.37	0.00 0.00	0.00 0.00	0.00 0.00
,						•			
14,300.00	90.00	179.74	12,100.00	-3,112.35	-858.08	3,165.09	0.00	0.00	0.00
14,400.00	90.00	179.74	12,100.00	-3,212.35	-857.63	3,264.81	0.00	0.00	0.00
14,500.00	90.00	179.74	12,100.00	-3,312.35	-857.17	3,364.53	0.00	0.00	0.00
14,600.00 14,700.00	90.00 90.00	179.74 179.74	12,100.00 12,100.00	-3,412.35 -3,512.35	-856.72 -856.27	3,464.25 3,563.96	0.00 0.00	0.00 0.00	0.00 0.00
14,800.00	90.00	179.74	12,100.00	-3,612.35	-855.82	3,663.68	0.00	0.00	0.00
14,900.00	90.00	179.74	12,100.00	-3,712.35	-855.36	3,763.40	0.00	0.00	0.00
15,000.00	90.00	179.74	12,100.00	-3,812.35	-854.91	3,863.12	0.00	0.00	0.00
15,100.00 15,200.00	90.00 90.00	179.74 179.74	12,100.00 12,100.00	-3,912.34 -4,012.34	-854.46 -854.00	3,962.84 4,062.56	0.00 0.00	0.00 0.00	0.00 0.00
15,300.00	90.00	179.74	12,100.00	-4,112.34	-853.55	4,162.27	0.00	0.00	0.00
15,400.00	90.00	179.74	12,100.00	-4,212.34	-853.10	4,261.99	0.00	0.00	0.00
15,500.00	90.00	179.74	12,100.00	-4,312.34	-852.64	4,361.71	0.00	0.00	0.00
15,600.00 15,700.00	90.00 90.00	179.74 179.74	12,100.00 12,100.00	-4,412.34 -4,512.34	-852.19 -851.74	4,461.43 4,561.15	0.00 0.00	0.00 0.00	0.00 0.00
15,800.00	90.00	179.74	12,100.00	-4,612.34	-851.29	4,660.87	0.00	0.00	0.00
15,900.00	90.00	179.74	12,100.00	-4,712.34	-850.83	4,760.58	0.00	0.00	0.00
16,000.00	90.00	179.74	12,100.00	-4,812.34	-850.38	4,860.30	0.00	0.00	0.00
16,100.00 16,200.00	90.00 90.00	179.74 179.74	12,100.00 12,100.00	-4,912.33 -5,012.33	-849.93 -849.47	4,960.02 5,059.74	0.00 0.00	0.00 0.00	0.00 0.00
						•			
16,300.00	90.00	179.74	12,100.00	-5,112.33	-849.02	5,159.46	0.00	0.00	0.00
16,400.00	90.00	179.74	12,100.00	-5,212.33	-848.57	5,259.18	0.00	0.00	0.00
16,500.00	90.00	179.74 170.74	12,100.00	-5,312.33	-848.11 947.66	5,358.90 5,459.61	0.00	0.00	0.00
16,600.00 16,700.00	90.00 90.00	179.74 179.74	12,100.00 12,100.00	-5,412.33 -5,512.33	-847.66 -847.21	5,458.61 5,558.33	0.00 0.00	0.00 0.00	0.00 0.00
16,800.00	90.00	179.74	12,100.00	-5,612.33	-846.76	5,658.05	0.00	0.00	0.00
16,900.00 17,000.00	90.00 90.00	179.74 179.74	12,100.00 12,100.00	-5,712.33 -5,812.33	-846.30 -845.85	5,757.77 5,857.49	0.00 0.00	0.00 0.00	0.00 0.00
17,000.00	90.00	179.74	12,100.00	-5,612.33 -5,912.32	-845.40	5,057.49 5,957.21	0.00	0.00	0.00
17,100.00	90.00	179.74	12,100.00	-6,012.32	-844.94	6,056.92	0.00	0.00	0.00
17,300.00	90.00	179.74	12,100.00	-6,112.32	-844.49	6,156.64	0.00	0.00	0.00
17,400.00 17,500.00	90.00	179.74 170.74	12,100.00 12,100.00	-6,212.32 -6,312.32	-844.04 843.58	6,256.36 6,356.08	0.00 0.00	0.00 0.00	0.00
17,500.00	90.00 90.00	179.74 179.74	12,100.00	-6,312.32 -6,412.32	-843.58 -843.13	6,356.08 6,455.80	0.00	0.00	0.00 0.00
17,700.00	90.00	179.74	12,100.00	-6,512.32	-842.68	6,555.52	0.00	0.00	0.00
17,800.00	90.00	179.74	12,100.00	-6,612.32	-842.23	6,655.23	0.00	0.00	0.00
17,900.00 18,000.00	90.00 90.00	179.74 179.74	12,100.00 12,100.00	-6,712.32 -6,812.32	-841.77 -841.32	6,754.95 6,854.67	0.00 0.00	0.00 0.00	0.00 0.00
18,100.00	90.00	179.74	12,100.00	-6,812.32 -6,912.31	-841.32 -840.87	6,854.67 6,954.39	0.00	0.00	0.00
18,200.00	90.00	179.74	12,100.00	-7,012.31	-840.41	7,054.11	0.00	0.00	0.00
18,300.00	90.00	179.74	12,100.00	-7,112.31	-839.96	7,153.83	0.00	0.00	0.00

Planning Report

Database: Company: Project:

Site:

HOPSPP

ENGINEERING DESIGNS

PRD NM DIRECTIONAL PLANS (NAD 1983)

Chuck Smith MDP1 8_17

Well: Chuck Smith MDP1 8_17 Fed Com 51H

Wellbore: Wellbore #1

Design: Permitting Plan

Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well Chuck Smith MDP1 8_17 Fed Com 51H

RKB = 25' @ 3492.00ft RKB = 25' @ 3492.00ft

Grid

Minimum Curvature

esign:	Permitting Pla	an							
lanned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
18,400.00	90.00	179.74	12,100.00	-7,212.31	-839.51	7,253.54	0.00	0.00	0.00
18,500.00	90.00	179.74	12,100.00	-7,312.31	-839.06	7,353.26	0.00	0.00	0.00
18,600.00	90.00	179.74	12,100.00	-7,412.31	-838.60	7,452.98	0.00	0.00	0.00
18,700.00	90.00	179.74	12,100.00	-7,512.31	-838.15	7,552.70	0.00	0.00	0.00
18,800.00	90.00	179.74	12,100.00	-7,612.31	-837.70	7,652.42	0.00	0.00	0.00
18,900.00	90.00	179.74	12,100.00	-7,712.31	-837.24	7,752.14	0.00	0.00	0.00
19,000.00	90.00	179.74	12,100.00	-7,812.30	-836.79	7,851.85	0.00	0.00	0.00
19,100.00	90.00	179.74	12,100.00	-7,912.30	-836.34	7,951.57	0.00	0.00	0.00
19,200.00	90.00	179.74	12,100.00	-8,012.30	-835.88	8,051.29	0.00	0.00	0.00
19,300.00	90.00	179.74	12,100.00	-8,112.30	-835.43	8,151.01	0.00	0.00	0.00
19,400.00	90.00	179.74	12,100.00	-8,212.30	-834.98	8,250.73	0.00	0.00	0.00
19,500.00	90.00	179.74	12,100.00	-8,312.30	-834.53	8,350.45	0.00	0.00	0.00
19,600.00	90.00	179.74	12,100.00	-8,412.30	-834.07	8,450.16	0.00	0.00	0.00
19,700.00	90.00	179.74	12,100.00	-8,512.30	-833.62	8,549.88	0.00	0.00	0.00
19,800.00	90.00	179.74	12,100.00	-8,612.30	-833.17	8,649.60	0.00	0.00	0.00
19,900.00	90.00	179.74	12,100.00	-8,712.30	-832.71	8,749.32	0.00	0.00	0.00
20,000.00	90.00	179.74	12,100.00	-8,812.29	-832.26	8,849.04	0.00	0.00	0.00
	90.00	179.74		-8,912.29	-831.81	8,948.76	0.00	0.00	0.00
20,100.00	90.00	179.74	12,100.00		-831.35		0.00	0.00	0.00
20,200.00			12,100.00	-9,012.29		9,048.47			
20,300.00	90.00	179.74	12,100.00	-9,112.29	-830.90	9,148.19	0.00	0.00	0.00
20,400.00	90.00	179.74	12,100.00	-9,212.29	-830.45	9,247.91	0.00	0.00	0.00
20,500.00	90.00	179.74	12,100.00	-9,312.29	-830.00	9,347.63	0.00	0.00	0.00
20,600.00	90.00	179.74	12,100.00	-9,412.29	-829.54	9,447.35	0.00	0.00	0.00
20,700.00	90.00	179.74	12,100.00	-9,512.29	-829.09	9,547.07	0.00	0.00	0.00
20,800.00	90.00	179.74	12,100.00	-9,612.29	-828.64	9,646.78	0.00	0.00	0.00
20,900.00	90.00	179.74	12,100.00	-9,712.29	-828.18	9,746.50	0.00	0.00	0.00
21,000.00	90.00	179.74	12,100.00	-9,812.28	-827.73	9,846.22	0.00	0.00	0.00
21,100.00	90.00	179.74	12,100.00	-9,912.28	-827.28	9,945.94	0.00	0.00	0.00
21,200.00	90.00	179.74	12,100.00	-10,012.28	-826.82	10,045.66	0.00	0.00	0.00
21,300.00	90.00	179.74	12,100.00	-10,112.28	-826.37	10,145.38	0.00	0.00	0.00
21,400.00	90.00	179.74	12,100.00	-10,212.28	-825.92	10,245.10	0.00	0.00	0.00
21,500.00	90.00	179.74	12,100.00	-10,312.28	-825.47	10,344.81	0.00	0.00	0.00
21,600.00	90.00	179.74	12,100.00	-10,412.28	-825.01	10,444.53	0.00	0.00	0.00
21,700.00	90.00	179.74	12,100.00	-10,512.28	-824.56	10,544.25	0.00	0.00	0.00
21,800.00	90.00	179.74	12,100.00	-10,612.28	-824.11	10,643.97	0.00	0.00	0.00
21,900.00	90.00	179.74	12,100.00	-10,712.28	-823.65	10,743.69	0.00	0.00	0.00
22,000.00	90.00	179.74	12,100.00	-10,812.27	-823.20	10,843.41	0.00	0.00	0.00
22,100.00	90.00	179.74	12,100.00	-10,912.27	-822.75	10,943.12	0.00	0.00	0.00
22,200.00	90.00	179.74	12,100.00	-10,912.27	-822.29	11,042.84	0.00	0.00	0.00
22,300.00	90.00	179.74	12,100.00	-11,112.27	-821.84	11,142.56	0.00	0.00	0.00
22,400.00	90.00	179.74	12,100.00	-11,212.27	-821.39	11,242.28	0.00	0.00	0.00
22,500.00	90.00	179.74	12,100.00	-11,312.27	-820.94	11,342.00	0.00	0.00	0.00
22,600.00	90.00	179.74	12,100.00	-11,412.27	-820.48	11,441.72	0.00	0.00	0.00
22,700.00	90.00	179.74	12,100.00	-11,512.27	-820.03	11,541.43	0.00	0.00	0.00
22,788.00	90.00	179.74	12,100.00	-11,600.27	-819.63	11,629.19	0.00	0.00	0.00
TD at 22788	ON' MD								

Planning Report

Database: HOPSPP

Company: **ENGINEERING DESIGNS**

Project: PRD NM DIRECTIONAL PLANS (NAD 1983)

Site: Chuck Smith MDP1 8_17

Well: Chuck Smith MDP1 8_17 Fed Com 51H

Wellbore: Wellbore #1 Design: Permitting Plan Local Co-ordinate Reference:

TVD Reference:

MD Reference: North Reference:

Survey Calculation Method:

Well Chuck Smith MDP1 8_17 Fed Com 51H

RKB = 25' @ 3492.00ft

RKB = 25' @ 3492.00ft

Minimum Curvature

Design Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (usft)	Easting (usft)	Latitude	Longitude
KOP (Chuck Smith - plan misses targe - Point	0.00 t center by 64	0.00 4.21ft at 82	8,097.00 52.30ft MD	-753.48 (8208.42 TVI	-868.16 D, -356.94 N,	451,423.93 -372.84 E)	704,441.71	32.239939	-103.805796
FTP (Chuck Smith - plan misses targe - Point	0.00 t center by 29		12,100.00 47.13ft MD	-1,153.50 (12072.19 TV	-866.95 /D, -1162.44 i	451,023.93 N, -863.36 E)	704,442.92	32.238840	-103.805798
PBHL (Chuck Smith	0.00	0.00	12,100.00	-11,600.27	-819.63	440,577.81	704,490.24	32.210125	-103.805811

plan hits target centerPoint

Formations						
	Measured Depth (ft)	Vertical Depth (ft)	Name	Lithology	Dip (°)	Dip Direction (°)
	607.00	607.00	RUSTLER			
	969.00	969.00	SALADO			
	2,814.00	2,814.00	CASTILE			
	4,222.00	4,222.00	DELAWARE			
	4,244.00	4,244.00	BELL CANYON			
	5,209.12	5,209.00	CHERRY CANYON			
	6,438.33	6,422.00	BRUSHY CANYON			
	8,139.16	8,097.00	BONE SPRING			
	9,187.07	9,129.00	BONE SPRING 1ST			
	9,852.17	9,784.00	BONE SPRING 2ND			
	11,118.40	11,031.00	BONE SPRING 3RD			
	11,577.37	11,483.00	WOLFCAMP			
	11,755.56	11,658.00	WOLFCAMP A			

Plan Annota	tions				
Measured		Vertical	Local Coordinates		
	Depth (ft)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Comment
	5,030.00	5,030.00	0.00	0.00	Build 2°/100'
	5,529.90	5,527.37	-30.09	-31.43	Hold 10° Tangent
	11,695.75	11,599.58	-770.36	-804.69	KOP, Build 10°/100'
	12,527.12	12,100.00	-1,339.50	-866.11	Landing Point
	22,788.00	12,100.00	-11,600.27	-819.63	TD at 22788.00' MD

PECOS DISTRICT DRILLING CONDITIONS OF APPROVAL

OPERATOR'S NAME:
WELL NAME & NO.:
LOCATION:
COUNTY:
OXY USA INCORPORATED
CHUCK SMITH MDP1 8-17 FEDERAL COM 51H
Section 5, T.24 S., R.31 E.
Eddy County, New Mexico

COA

H2S	• Yes	O No	
Potash	O None	Secretary	O R-111-P
Cave/Karst Potential	• Low	O Medium	O High
Cave/Karst Potential	O Critical		
Variance	O None	• Flex Hose	Other
Wellhead	Conventional	Multibowl	O Both
Wellhead Variance	O Diverter		
Other	□4 String	☐ Capitan Reef	□WIPP
Other	☐ Fluid Filled	☐ Pilot Hole	☐ Open Annulus
Cementing	☐ Contingency	☐ EchoMeter	Primary Cement
_	Cement Squeeze		Squeeze
Special Requirements	☐ Water Disposal	☑ COM	☐ Unit
Special Requirements	☐ Batch Sundry		
Special Requirements	☑ Break Testing	✓ Offline	☐ Casing
Variance	_	Cementing	Clearance

A. HYDROGEN SULFIDE

A Hydrogen Sulfide (H2S) Drilling Plan shall be activated AT SPUD. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items. If Hydrogen Sulfide is encountered, please provide measured values and formations to the BLM.

B. CASING

Primary Casing Design:

- 1. The **13-3/8** inch surface casing shall be set at approximately **909** feet (a minimum of 70 feet (Eddy County) into the Rustler Anhydrite, above the salt, and below usable fresh water) and cemented to the surface.
 - a. If cement does not circulate to the surface, the appropriate BLM office shall be notified and a temperature survey utilizing an electronic type temperature

- survey with surface log readout will be used or a cement bond log shall be run to verify the top of the cement. Temperature survey will be run a minimum of six hours after pumping cement and ideally between 8-10 hours after completing the cement job.
- b. Wait on cement (WOC) time for a primary cement job will be a minimum of **24 hours in the Potash Area** or 500 pounds compressive strength, whichever is greater. (This is to include the lead cement)
- c. Wait on cement (WOC) time for a remedial job will be a minimum of 4 hours after bringing cement to surface or 500 pounds compressive strength, whichever is greater.
- d. If cement falls back, remedial cementing will be done prior to drilling out that string.
- 2. The 9-5/8 inch intermediate casing shall be set at approximately 11,596 feet. KEEP CASING MINIMUM 2/3 FULL FOR COLLAPSE SF. REVIEW EXTERNAL PRESSURE IN PRESSURE TEST LOAD CASE. The minimum required fill of cement behind the 9-5/8 inch intermediate casing is:

Option 1 (Single Stage):

• Cement to surface. If cement does not circulate see B.1.a, c-d above.

Operator has proposed to cement in two stages by conventionally cementing the first stage and performing a bradenhead squeeze on the second stage, contingent upon no returns to surface.

- a. First stage: Operator will cement with intent to reach the top of the **Brushy** Canyon
- b. Second stage:
 - Operator will perform bradenhead squeeze and top-out. Cement to surface. If cement does not reach surface, the appropriate BLM office shall be notified
- ❖ In <u>Secretary Potash Areas</u> if cement does not circulate to surface on the first two casing strings, the cement on the 3rd casing string must come to surface.

Operator has proposed to pump down 13-3/8" X 9-5/8" annulus. Operator must top out cement after the bradenhead squeeze and verify cement to surface. Operator can also check TOC with Echo-meter. CBL must be run from TD of the 9-5/8" casing to surface if confidence is lacking on the quality of the bradenhead squeeze cement job. Submit results to BLM.

If cement does not tie-back into the previous casing shoe, a third stage remediation BH may be performed. The appropriate BLM office shall be notified.

Bradenhead squeeze in the production interval is only as an edge case remediation measure and is NOT approved in this COA. If production cement job experiences losses and a bradenhead squeeze is needed for tie-back, BLM Engineering should be notified prior to job with volumes and planned wellbore schematic. CBL will be needed when this occurs.

3. The 7 inch x 5.5 inch tapered production casing shall be set at approximately 22,788 feet. The minimum required fill of cement behind the 7 inch x 5.5 inch production casing is:

Option 1 (Single Stage):

• Cement should tie-back at least **500 feet** into previous casing string. Operator shall provide method of verification.

C. PRESSURE CONTROL

- 1. Variance approved to use flex line from BOP to choke manifold. Manufacturer's specification to be readily available. No external damage to flex line. Flex line to be installed as straight as possible (no hard bends).'
- 2. Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the 13-3/8 inch surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 10,000 (10M) psi. Variance is approved to use a 5000 (5M) Annular which shall be tested to 3500 (70% Working Pressure) psi.
 - a. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
 - b. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
 - c. Manufacturer representative shall install the test plug for the initial BOP test.
 - d. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
 - e. Whenever any seal subject to test pressure is broken, all the tests in OOGO2.III.A.2.i must be followed.

D. SPECIAL REQUIREMENT (S)

Communitization Agreement

- The operator will submit a Communitization Agreement to the Santa Fe Office, 301 Dinosaur Trail Santa Fe, New Mexico 87508, at least 90 days before the anticipated date of first production from a well subject to a spacing order issued by the New Mexico Oil Conservation Division. The Communitization Agreement will include the signatures of all working interest owners in all Federal and Indian leases subject to the Communitization Agreement (i.e., operating rights owners and lessees of record), or certification that the operator has obtained the written signatures of all such owners and will make those signatures available to the BLM immediately upon request.
- The operator will submit an as-drilled survey well plat of the well completion, but are not limited to, those specified in Onshore Order 1 and 2.
- If the operator does not comply with this condition of approval, the BLM may take enforcement actions that include, but are not limited to, those specified in 43 CFR 3163.1.
- In addition, the well sign shall include the surface and bottom hole lease numbers. When the Communitization Agreement number is known, it shall also be on the sign.

(Note: For a minimum 5M BOPE or less (Utilizing a 10M BOPE system) BOPE Break Testing Variance

- BOPE Break Testing is ONLY permitted for 5M BOPE or less. (Annular preventer must be tested to a minimum of 70% of BOPE working pressure and shall be higher than the MASP)
- BOPE Break Testing is NOT permitted to drilling the production hole section.
- Variance only pertains to the intermediate hole-sections and no deeper than the Bone Springs formation.
- While in transfer between wells, the BOPE shall be secured by the hydraulic carrier or cradle.
- Any well control event while drilling require notification to the BLM Petroleum Engineer (575-706-2779) prior to the commencement of any BOPE Break Testing operations.
- A full BOPE test is required prior to drilling the first deep intermediate hole section. If any subsequent hole interval is deeper than the first, a full BOPE test will be required. (200' TVD tolerance between intermediate shoes is allowable).
- The BLM is to be contacted (575-361-2822 Eddy County) 4 hours prior to BOPE tests.
- As a minimum, a full BOPE test shall be performed at 21-day intervals.
- In the event any repairs or replacement of the BOPE is required, the BOPE shall test as per Onshore Oil and Gas Order No. 2.
- If in the event break testing is not utilized, then a full BOPE test would be conducted.

Offline Cementing

Contact the BLM prior to the commencement of any offline cementing procedure.

GENERAL REQUIREMENTS

The BLM is to be notified in advance for a representative to witness:

- a. Spudding well (minimum of 24 hours)
- b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
- c. BOPE tests (minimum of 4 hours)

Contact Eddy County Petroleum Engineering Inspection Staff: Email or call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220; BLM_NM_CFO_DrillingNotifications@BLM.GOV; (575) 361-2822

Contact Lea County Petroleum Engineering Inspection Staff: Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240, (575) 689-5981

- 1. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval.
- a. In the event the operator has proposed to drill multiple wells utilizing a skid/walking rig. Operator shall secure the wellbore on the current well, after installing and testing the wellhead, by installing a blind flange of like pressure rating to the wellhead and a pressure gauge that can be monitored while drilling is performed on the other well(s).
- b. When the operator proposes to set surface casing with Spudder Rig
- i. Notify the BLM when moving in and removing the Spudder Rig.
- ii. Notify the BLM when moving in the 2nd Rig. Rig to be moved in within 90 days of notification that Spudder Rig has left the location.
- iii. BOP/BOPE test to be conducted per 43 CFR 3172 as soon as 2nd Rig is rigged up on well.
- 2. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works are located, this does not include the dog house or stairway area.
- 3. For intervals in which cement to surface is required, cement to surface should be verified with a visual check and density or pH check to differentiate cement from spacer and drilling mud. The results should be documented in the driller's log and daily reports.

A. CASING

- 1. Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size or are Non-API. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.). The initial wellhead installed on the well will remain on the well with spools used as needed.
- 2. Wait on cement (WOC) for Potash Areas: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of

the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi for all cement blends of both lead and tail cement, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.

- 3. Wait on cement (WOC) for Water Basin: After cementing but before commencing any tests, the casing string shall stand cemented under pressure until both of the following conditions have been met: 1) cement reaches a minimum compressive strength of 500 psi at the shoe, 2) until cement has been in place at least 8 hours. WOC time will be recorded in the driller's log. See individual casing strings for details regarding lead cement slurry requirements. The casing integrity test can be done (prior to the cement setting up) immediately after bumping the plug.
- 4. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. Have well specific cement details onsite prior to pumping the cement for each casing string.
- 5. No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.
- 6. On that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- 7. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.
- 8. Whenever a casing string is cemented in the R-111-Q potash area, the NMOCD requirements shall be followed.

B. PRESSURE CONTROL

- 1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in 43 CFR 3172.
- 2. If a variance is approved for a flexible hose to be installed from the BOP to the choke manifold, the following requirements apply: The flex line must meet the requirements of API 16C. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.
- 3. 5M or higher system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.
- 4. If the operator has proposed a multi-bowl wellhead assembly in the APD. The following requirements must be met:

- i. Wellhead shall be installed by manufacturer's representatives, submit documentation with subsequent sundry.
- ii. If the welding is performed by a third party, the manufacturer's representative shall monitor the temperature to verify that it does not exceed the maximum temperature of the seal.
- iii. Manufacturer representative shall install the test plug for the initial BOP test.
- iv. Whenever any seal subject to test pressure is broken, all the tests in 43 CFR 3172.6(b)(9) must be followed.
- v. If the cement does not circulate and one inch operations would have been possible with a standard wellhead, the well head shall be cut off, cementing operations performed and another wellhead installed.
- 5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
- i. In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips, the minimum wait time before cut-off is eight hours after bumping the plug. BOP/BOPE testing can begin after cut-off or once cement reaches 500 psi compressive strength (including lead cement), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).
- ii. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the cement plug. The BOPE test can be initiated after bumping the cement plug with the casing valve open. (only applies to single stage cement jobs, prior to the cement setting up.)
- iii. The tests shall be done by an independent service company utilizing a test plug not a cup or J-packer and can be initiated immediately with the casing valve open. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to 43 CFR 3172 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for 8 hours or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).
- iv. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock. If a twelve hour or twenty-four hour chart is used, tester shall make a notation that it is run with a two hour clock.
- v. The results of the test shall be reported to the appropriate BLM office.
- vi. All tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.
- vii. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30

minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

viii. BOP/BOPE must be tested by an independent service company within 500 feet of the top of the Wolfcamp formation if the time between the setting of the intermediate casing and reaching this depth exceeds 20 days. This test does not exclude the test prior to drilling out the casing shoe as per 43 CFR 3172.

C. DRILLING MUD

Mud system monitoring equipment, with derrick floor indicators and visual and audio alarms, shall be operating before drilling into the Wolfcamp formation, and shall be used until production casing is run and cemented.

D. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area. Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.

KPI 9/7/2024

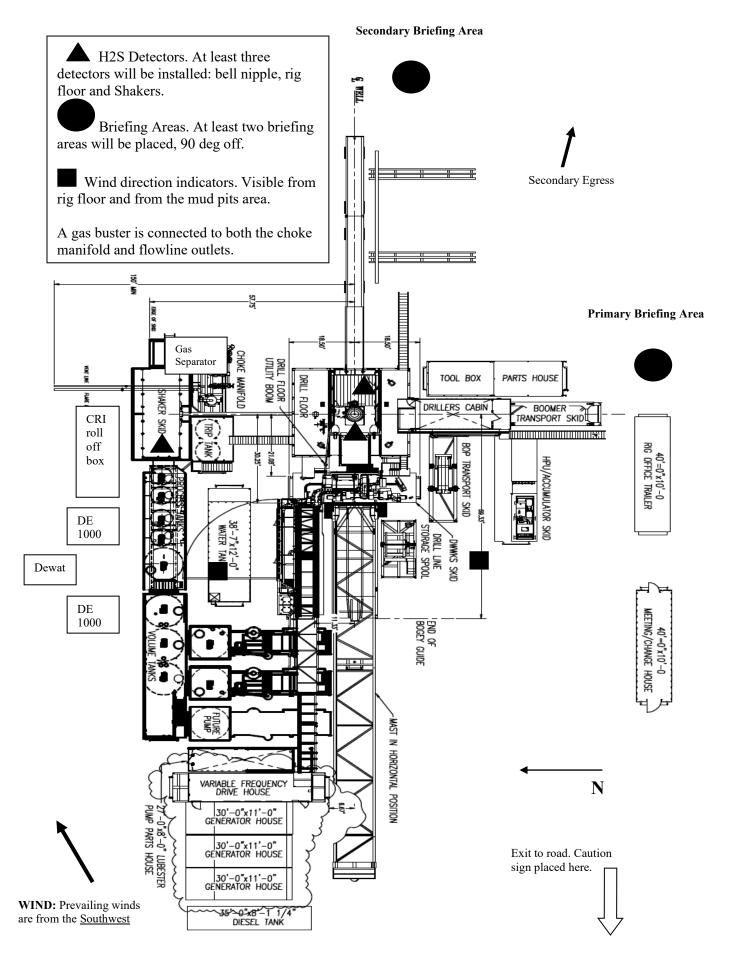


Permian Drilling Hydrogen Sulfide Drilling Operations Plan

Open drill site. No homes or buildings are near the proposed location.

1. Escape

Personnel shall escape upwind of wellbore in the event of an emergency gas release. Escape can take place through the lease road on the Southeast side of the location. Personnel need to move to a safe distance and block the entrance to location. If the primary route is not an option due to the wind direction, then a secondary egress route should be taken.





Permian Drilling Hydrogen Sulfide Drilling Operations Plan New Mexico

Scope

This contingency plan establishes guidelines for the public, all company employees, and contract employees who's work activities may involve exposure to hydrogen sulfide (H2S) gas.

While drilling this well, it is possible to encounter H2S bearing formations. At all times, the first barrier to control H2S emissions will be the drilling fluid, which will have a density high enough to control influx.

Objective

- 1. Provide an immediate and predetermined response plan to any condition when H2S is detected. All H2S detections in excess of 10 parts per million (ppm) concentration are considered an Emergency.
- 2. Prevent any and all accidents, and prevent the uncontrolled release of hydrogen sulfide into the atmosphere.
- 3. Provide proper evacuation procedures to cope with emergencies.
- 4. Provide immediate and adequate medical attention should an injury occur.

Discussion

Implementation: This plan with all details is to be fully implemented

before drilling to commence.

Emergency response

Procedure:

This section outlines the conditions and denotes steps

to be taken in the event of an emergency.

Emergency equipment

Procedure:

This section outlines the safety and emergency

equipment that will be required for the drilling of this

well.

Training provisions: This section outlines the training provisions that

must be adhered to prior to drilling.

Drilling emergency call lists: Included are the telephone numbers of all persons to

be contacted should an emergency exist.

Briefing: This section deals with the briefing of all people

involved in the drilling operation.

Public safety: Public safety personnel will be made aware of any

potential evacuation and any additional support

needed.

Check lists: Status check lists and procedural check lists have been

included to insure adherence to the plan.

General information: A general information section has been included to

supply support information.

Hydrogen Sulfide Training

All personnel, whether regularly assigned, contracted, or employed on an unscheduled basis, will receive training from a qualified instructor in the following areas prior to commencing drilling operations on the well:

- 1. The hazards and characteristics of H2S.
- 2. Proper use and maintenance of personal protective equipment and life support systems.
- 3. H2S detection.
- 4. Proper use of H2S detectors, alarms, warning systems, briefing areas, evacuation procedures and prevailing winds.
- 5. Proper techniques for first aid and rescue procedures.
- 6. Physical effects of hydrogen sulfide on the human body.
- 7. Toxicity of hydrogen sulfide and sulfur dioxide.
- 8. Use of SCBA and supplied air equipment.
- 9. First aid and artificial respiration.
- 10. Emergency rescue.

In addition, supervisory personnel will be trained in the following areas:

- 1. The effects of H2S on metal components. If high tensile strength tubular is to be used, personnel will be trained in their special maintenance requirements.
- 2. Corrective action and shut-in procedures when drilling a well, blowout prevention and well control procedures.
- 3. The contents and requirements of the H2S Drilling Operations Plan.

H2S training refresher must have been taken within one year prior to drilling the well. Specifics on the well to be drilled will be discussed during the pre-spud meeting. H2S and well control (choke) drills will be performed while drilling the well, at least on a weekly basis. This plan shall be available in the well site. All personnel will be required to carry the documentation proving that the H2S training has been taken.

Service company and visiting personnel

- A. Each service company that will be on this well will be notified if the zone contains H2S.
- B. Each service company must provide for the training and equipment of their employees before they arrive at the well site.
- C. Each service company will be expected to attend a well site

Emergency Equipment Requirements

1. Well control equipment

The well shall have hydraulic BOP equipment for the anticipated pressures. Equipment is to be tested on installation and follow Oxy Well Control standard, as well as 43 CFR part 3170 Subpart 3172.

Special control equipment:

- A. Hydraulic BOP equipment with remote control on ground. Remotely operated choke.
- B. Rotating head
- C. Gas buster equipment shall be installed before drilling out of surface pipe.

2. <u>Protective equipment for personnel</u>

- A. Four (4) 30-minute positive pressure air packs (2 at each briefing area) on location.
- B. Adequate fire extinguishers shall be located at strategic locations.
- C. Radio / cell telephone communication will be available at the rig.
 - Rig floor and trailers.
 - Vehicle.

3. Hydrogen sulfide sensors and alarms

- A. H2S sensor with alarms will be located on the rig floor, at the bell nipple, and at the flow line. These monitors will be set to alarm at 10 ppm with strobe light, and audible alarm.
- B. Hand operated detectors with tubes.
- C. H2S monitor tester (to be provided by contract Safety Company.)
- D. There shall be one combustible gas detector on location at all times.

4. <u>Visual Warning Systems</u>

A. One sign located at each location entrance with the following language:

Caution – potential poison gas Hydrogen sulfide No admittance without authorization

Wind sock – wind streamers:

- A. One 36" (in length) wind sock located at protection center, at height visible from rig floor.
- B. One 36" (in length) wind sock located at height visible from pit areas.

Condition flags

A. One each condition flag to be displayed to denote conditions.

```
green – normal conditions
yellow – potential danger
red – danger, H2S present
```

B. Condition flag shall be posted at each location sign entrance.

5. <u>Mud Program</u>

The mud program is designed to minimize the risk of having H2S and other formation fluids at surface. Proper mud weight and safe drilling practices will be applied. H2S scavengers will be used to minimize the hazards while drilling. Below is a summary of the drilling program.

Mud inspection devices:

Garrett gas train or hatch tester for inspection of sulfide concentration in mud system.

6. Metallurgy

- A. Drill string, casing, tubing, wellhead, blowout preventers, drilling spools or adapters, kill lines, choke manifold, lines and valves shall be suitable for the H2S service.
- B. All the elastomers, packing, seals and ring gaskets shall be suitable for H2S service.

7. Well Testing

No drill stem test will be performed on this well.

8. Evacuation plan

Evacuation routes should be established prior to well spud for each well and discussed with all rig personnel.

9. <u>Designated area</u>

- A. Parking and visitor area: all vehicles are to be parked at a predetermined safe distance from the wellhead.
- B. There will be a designated smoking area.
- C. Two briefing areas on either side of the location at the maximum allowable distance from the well bore so they offset prevailing winds perpendicularly, or at a 45-degree angle if wind direction tends to shift in the area.

Emergency procedures

- A. In the event of any evidence of H2S level above 10 ppm, take the following steps:
 - 1. The Driller will pick up off bottom, shut down the pumps, slow down the pipe rotation.
 - 2. Secure and don escape breathing equipment, report to the upwind designated safe briefing / muster area.
 - 3. All personnel on location will be accounted for and emergency search should begin for any missing, the Buddy System will be implemented.
 - 4. Order non-essential personnel to leave the well site, order all essential personnel out of the danger zone and upwind to the nearest designated safe briefing / muster area.
 - 5. Entrance to the location will be secured to a higher level than our usual "Meet and Greet" requirement, and the proper condition flag will be displayed at the entrance to the location.
 - 6. Take steps to determine if the H2S level can be corrected or suppressed and, if so, proceed as required.

B. If uncontrollable conditions occur:

1. Take steps to protect and/or remove any public in the down-wind area from the rig – partial evacuation and isolation. Notify necessary public safety personnel and appropriate regulatory entities (i.e. BLM) of the situation.

- 2. Remove all personnel to the nearest upwind designated safe briefing / muster area or off location.
- 3. Notify public safety personnel of safe briefing / muster area.
- 4. An assigned crew member will blockade the entrance to the location. No unauthorized personnel will be allowed entry to the location.
- 5. Proceed with best plan (at the time) to regain control of the well. Maintain tight security and safety procedures.

C. Responsibility:

- 1. Designated personnel.
 - a. Shall be responsible for the total implementation of this plan.
 - b. Shall be in complete command during any emergency.
 - c. Shall designate a back-up.

All personnel:

- 1. On alarm, don escape unit and report to the nearest upwind designated safe briefing / muster area upw
- 2. Check status of personnel (buddy system).
- 3. Secure breathing equipment.
- 4. Await orders from supervisor.

Drill site manager:

- 1. Don escape unit if necessary and report to nearest upwind designated safe briefing / muster area.
- 2. Coordinate preparations of individuals to return to point of release with tool pusher and driller (using the buddy system).
- 3. Determine H2S concentrations.
- 4. Assess situation and take control measures.

Tool pusher:

- 1. Don escape unit Report to up nearest upwind designated safe briefing / muster area.
- 2. Coordinate preparation of individuals to return to point of release with tool pusher drill site manager (using the buddy system).
- 3. Determine H2S concentration.
- 4. Assess situation and take control measures.

Driller:

1. Don escape unit, shut down pumps, continue

rotating DP.

- 2. Check monitor for point of release.
- 3. Report to nearest upwind designated safe briefing / muster area.
- 4. Check status of personnel (in an attempt to rescue, use the buddy system).
- 5. Assigns least essential person to notify Drill Site Manager and tool pusher by quickest means in case of their absence.
- 6. Assumes the responsibilities of the Drill Site Manager and tool pusher until they arrive should they be absent.

Derrick man Floor man #1 Floor man #2 1. Will remain in briefing / muster area until instructed by supervisor.

Mud engineer:

- 1. Report to nearest upwind designated safe briefing / muster area.
- 2. When instructed, begin check of mud for ph and H2S level. (Garett gas train.)

Safety personnel:

1. Mask up and check status of all personnel and secure operations as instructed by drill site manager.

Taking a kick

When taking a kick during an H2S emergency, all personnel will follow standard Well control procedures after reporting to briefing area and masking up.

Open-hole logging

All unnecessary personnel off floor. Drill Site Manager and safety personnel should monitor condition, advise status and determine need for use of air equipment.

Running casing or plugging

Following the same "tripping" procedure as above. Drill Site Manager and safety personnel should determine if all personnel have access to protective equipment.

Ignition procedures

The decision to ignite the well is the responsibility of the operator (Oxy Drilling Management). The decision should be made only as a last resort and in a situation where it is clear that:

- 1. Human life and property are endangered.
- 2. There is no hope controlling the blowout under the prevailing conditions at the well.

<u>Instructions for igniting the well</u>

- 1. Two people are required for the actual igniting operation. They must wear self-contained breathing units and have a safety rope attached. One man (tool pusher or safety engineer) will check the atmosphere for explosive gases with the gas monitor. The other man is responsible for igniting the well.
- 2. Primary method to ignite: 25 mm flare gun with range of approximately 500 feet.
- 3. Ignite upwind and do not approach any closer than is warranted.
- 4. Select the ignition site best for protection, and which offers an easy escape route.
- 5. Before firing, check for presence of combustible gas.
- 6. After lighting, continue emergency action and procedure as before.
- 7. All unassigned personnel will remain in briefing area until instructed by supervisor or directed by the Drill Site Manager.

<u>Remember</u>: After well is ignited, burning hydrogen sulfide will convert to sulfur dioxide, which is also highly toxic. <u>Do not assume the area is safe after the well is ignited.</u>

Status check list

Note: All items on this list must be completed before drilling to production casing point.

- 1. H2S sign at location entrance.
- 2. Two (2) wind socks located as required.
- 3. Four (4) 30-minute positive pressure air packs (2 at each Briefing area) on location for all rig personnel and mud loggers.
- 4. Air packs inspected and ready for use.
- 5. Cascade system and hose line hook-up as needed.
- 6. Cascade system for refilling air bottles as needed.
- 7. Condition flag on location and ready for use.
- 8. H2S detection system hooked up and tested.
- 9. H2S alarm system hooked up and tested.
- 10. Hand operated H2S detector with tubes on location.
- 11. 1-100' length of nylon rope on location.
- 12. All rig crew and supervisors trained as required.
- 13. All outside service contractors advised of potential H2S hazard on well.
- 14. No smoking sign posted and a designated smoking area identified.
- 15. Calibration of all H2S equipment shall be noted on the IADC report.

Checked by:	Date:
encerca oy.	Bate.

Procedural check list during H2S events

Perform each tour:

- 1. Check fire extinguishers to see that they have the proper charge.
- 2. Check breathing equipment to ensure that it in proper working order.
- 3. Make sure all the H2S detection system is operative.

Perform each week:

- 1. Check each piece of breathing equipment to make sure that demand or forced air regulator is working. This requires that the bottle be opened and the mask assembly be put on tight enough so that when you inhale, you receive air or feel air flow.
- 2. BOP skills (well control drills).
- 3. Check supply pressure on BOP accumulator stand by source.
- 4. Check breathing equipment mask assembly to see that straps are loosened and turned back, ready to put on.
- 5. Check pressure on breathing equipment air bottles to make sure they are charged to full volume. (Air quality checked for proper air grade "D" before bringing to location)
- 6. Confirm pressure on all supply air bottles.
- 7. Perform breathing equipment drills with on-site personnel.
- 8. Check the following supplies for availability.
 - A. Emergency telephone list.
 - B. Hand operated H2S detectors and tubes.

General evacuation plan

- 1. When the company approved supervisor (Drill Site Manager, consultant, rig pusher, or driller) determines the H2S gas cannot be limited to the well location and the public will be involved, he will activate the evacuation plan.
- 2. Drill Site Manager or designee will notify local government agency that a hazardous condition exists and evacuation needs to be implemented.
- 3. Company or contractor safety personnel that have been trained in the use of H2S detection equipment and self-contained breathing equipment will monitor H2S concentrations, wind directions, and area of exposure. They will delineate the outer perimeter of the hazardous gas area. Extension to the evacuation area will be determined from information gathered.
- 4. Law enforcement personnel (state police, police dept., fire dept., and sheriff's dept.) Will be called to aid in setting up and maintaining road blocks. Also, they will aid in evacuation of the public if necessary.
- 5. After the discharge of gas has been controlled, company safety personnel will determine when the area is safe for re-entry.

<u>Important:</u> Law enforcement personnel will not be asked to come into a contaminated area. Their assistance will be limited to uncontaminated areas. Constant radio contact will be maintained with them.

Emergency actions

Well blowout – if emergency

- 1. Evacuate all personnel to "Safe Briefing / Muster Areas" or off location if needed.
- 2. If sour gas evacuate rig personnel.
- 3. If sour gas evacuate public within 3000 ft radius of exposure.
- 4. Don SCBA and shut well in if possible using the buddy system.
- 5. Notify Drilling Superintendent and call 911 for emergency help (fire dept and ambulance) if needed.
- 6. Implement the Blowout Contingency Plan, and Drilling Emergency Action Plan.
- 6. Give first aid as needed.

Person down location/facility

- 1. If immediately possible, contact 911. Give location and wait for confirmation.
- 2. Don SCBA and perform rescue operation using buddy system.

Toxic effects of hydrogen sulfide

Hydrogen sulfide is extremely toxic. The acceptable ceiling concentration for eight-hour exposure is 10 ppm, which is .001% by volume. Hydrogen sulfide is heavier than air (specific gravity – 1.192) and colorless. It forms an explosive mixture with air between 4.3 and 46.0 percent by volume. Hydrogen sulfide is almost as toxic as hydrogen cyanide and is between five and six times more toxic than carbon monoxide. Toxicity data for hydrogen sulfide and various other gases are compared in table i. Physical effects at various hydrogen sulfide exposure levels are shown in table ii.

Table i Toxicity of various gases

Common name	Chemical formula	Specific gravity	Threshold limit	Hazardous limit	Lethal concentration (3)
TT 1	TT	(sc=1)	(1)	(2)	200
Hydrogen Cyanide	Hen	0.94	10 ppm	150 ppm/hr	300 ppm
Hydrogen Sulfide	H2S	1.18	10 ppm	250 ppm/hr	600 ppm
Sulfur Dioxide	So2	2.21	5 ppm	-	1000 ppm
Chlorine	C12	2.45	1 ppm	4 ppm/hr	1000 ppm
Carbon Monoxide	Co	0.97	50 ppm	400 ppm/hr	1000 ppm
Carbon Dioxide	Co2	1.52	5000 ppm	5%	10%
Methane	Ch4	0.55	90,000 ppm	Combustib	le above 5% in air

- 1) threshold limit concentration at which it is believed that all workers may be repeatedly exposed day after day without adverse effects.
- 2) hazardous limit concentration that will cause death with short-term exposure.
- 3) lethal concentration concentration that will cause death with short-term exposure.

Toxic effects of hydrogen sulfide

Table ii Physical effects of hydrogen sulfide

		Concentration	Physical effects
Percent (%)	Ppm	Grains	
, ,	-	100 std. Ft3*	
0.001	<10	00.65	Obvious and unpleasant odor.

0.002	10	01.30	Safe for 8 hours of exposure.
0.010	100	06.48	Kill smell in $3 - 15$ minutes. May sting eyes and throat.
0.020	200	12.96	Kills smell shortly; stings eyes and throat.
0.050	500	32.96	Dizziness; breathing ceases in a few minutes; needs prompt artificial respiration.
0.070	700	45.36	Unconscious quickly; death will result if not rescued promptly.
0.100	1000	64.30	Unconscious at once; followed by death within minutes.

^{*}at 15.00 psia and 60'f.

Use of self-contained breathing equipment (SCBA)

- 1. Written procedures shall be prepared covering safe use of SCBA's in dangerous atmosphere, which might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available SCBA.
- 2 SCBA's shall be inspected frequently at random to insure that they are properly used, cleaned, and maintained.
- 3. Anyone who may use the SCBA's shall be trained in how to insure proper facepiece to face seal. They shall wear SCBA's in normal air and then wear them in a
 test atmosphere. (note: such items as facial hair {beard or sideburns} and
 eyeglasses will not allow proper seal.) Anyone that may be reasonably expected
 to wear SCBA's should have these items removed before entering a toxic
 atmosphere. A special mask must be obtained for anyone who must wear
 eyeglasses or contact lenses.
- 4. Maintenance and care of SCBA's:
 - a. A program for maintenance and care of SCBA's shall include the following:
 - 1. Inspection for defects, including leak checks.
 - 2. Cleaning and disinfecting.
 - 3. Repair.
 - 4. Storage.
 - b. Inspection, self-contained breathing apparatus for emergency use shall be inspected monthly.
 - 1. Fully charged cylinders.
 - 2. Regulator and warning device operation.
 - 3. Condition of face piece and connections.
 - 4. Rubber parts shall be maintained to keep them pliable and prevent deterioration.
 - c. Routinely used SCBA's shall be collected, cleaned and disinfected as frequently as necessary to insure proper protection is provided.
- 5. Persons assigned tasks that requires use of self-contained breathing equipment shall be certified physically fit (medically cleared) for breathing equipment usage at least annually.
- 6. SCBA's should be worn when:
 - A. Any employee works near the top or on top of any tank unless test reveals less than 10 ppm of H2S.

- B. When breaking out any line where H2S can reasonably be expected.
- C. When sampling air in areas to determine if toxic concentrations of H2S exists.
- D. When working in areas where over 10 ppm H2S has been detected.
- E. At any time there is a doubt as to the H2S level in the area to be entered.

Rescue First aid for H2S poisoning

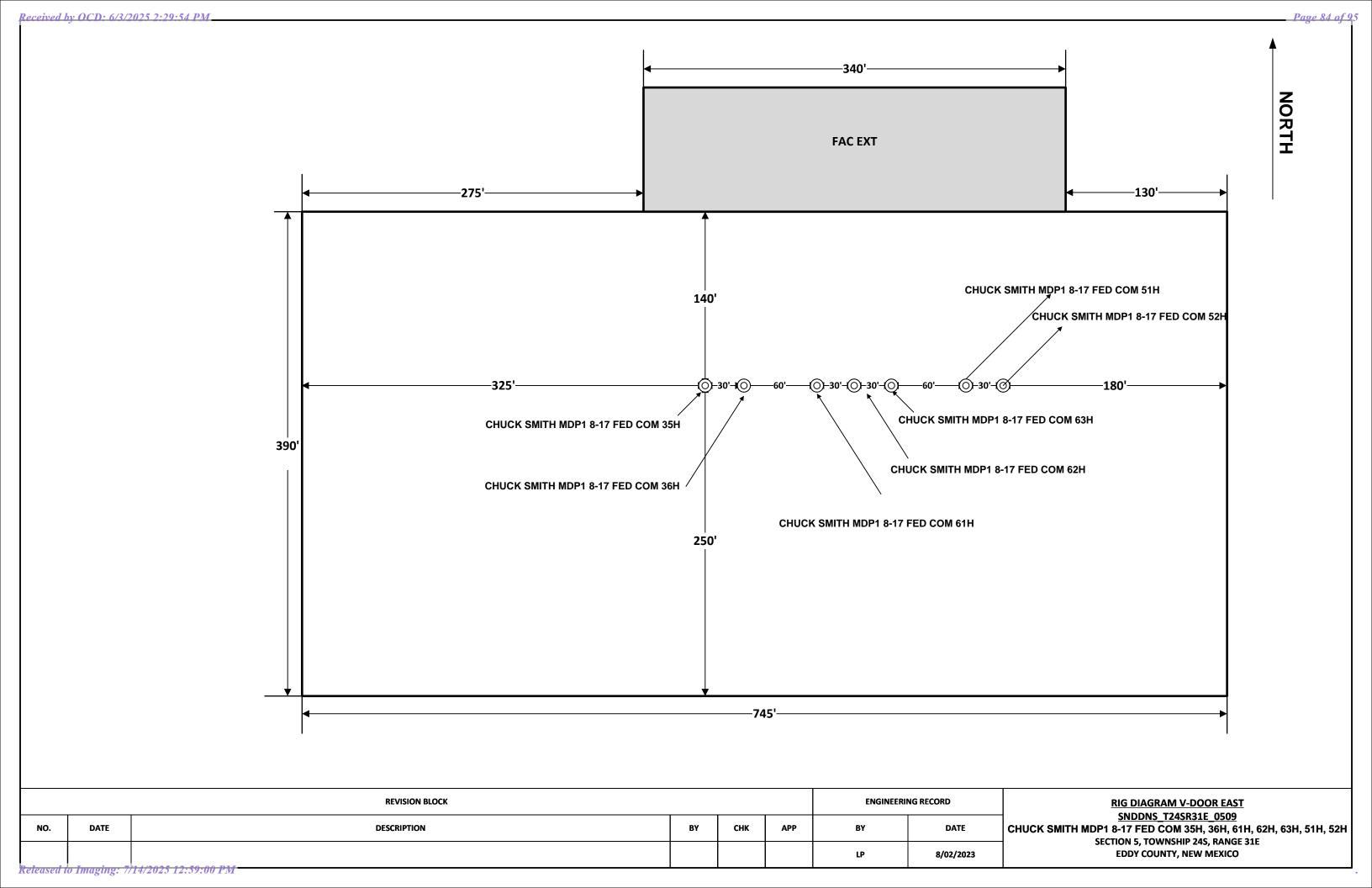
Do not panic!

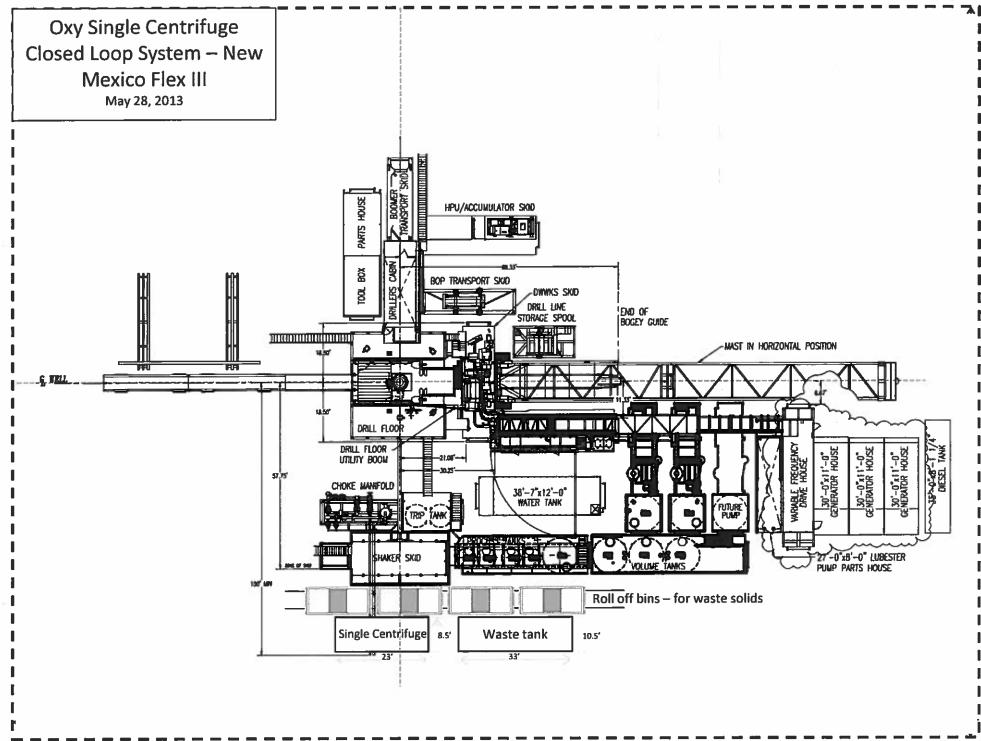
Remain calm – think!

- 1. Don SCBA breathing equipment.
- 2. Remove victim(s) utilizing buddy system to fresh air as quickly as possible. (go up-wind from source or at right angle to the wind. Not down wind.)
- 3. Briefly apply chest pressure arm lift method of artificial respiration to clean the victim's lungs and to avoid inhaling any toxic gas directly from the victim's lungs.
- 4. Provide for prompt transportation to the hospital, and continue giving artificial respiration if needed.
- 5. Hospital(s) or medical facilities need to be informed, before-hand, of the possibility of H2S gas poisoning no matter how remote the possibility is.
- 6. Notify emergency room personnel that the victim(s) has been exposed to H2S gas.

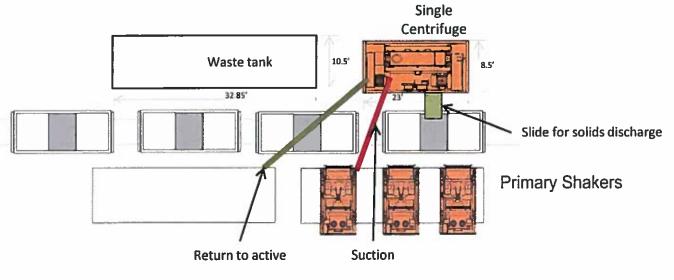
Besides basic first aid, everyone on location should have a good working knowledge of artificial respiration.

Revised CM 6/27/2012









	0.000		





Oxy Single Centrifuge Closed Loop System – New Mexico Flex III May 28, 2013

OXY

SITE PLAN

CHUCK SMITH MDP1 8 17 FED COM (SNDDNS T24SR31E 0509)

SEC. 5 TWP. 24-S RGE. 31-E

SURVEY: N.M.P.M.

COUNTY: EDDY OPERATOR: OXY USA, INC.

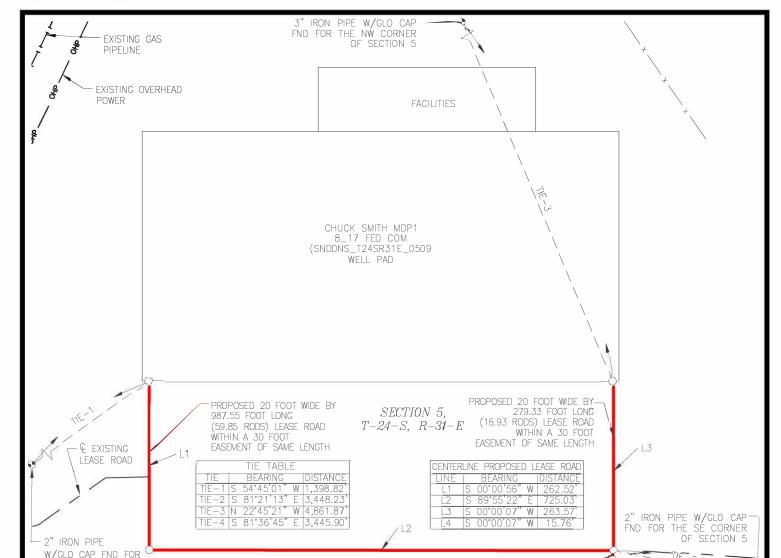
U.S.G.S. TOPOGRAPHIC MAP: BIG SINKS, N.M.

FAA PERMIT NEEDED: NO



SCALE: 1"

= 150



BASIS OF BEARING

DATE SURVEYED

THE SW CORNER OF

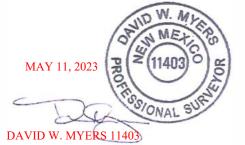
04/28/2023

SECTION 5

ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. (ALL BEARINGS, DISTANCES, COORDINATES AND AREAS ARE GRID MEASUREMENTS UTILIZING A COMBINED SCALE FACTOR OF 0.99977704 AND A CONVERGENCE ANGLE OF 0.28238333*.)

CHUCK SMITH MDP1 8_17 FED COM (SNDDNS T24SR31E 0501 WELL PAD





L4-



OHP:

TIE-4

EXISTING WELL PAD

05/08/2023

PREPARED BY:
DELTA FIELD SERVICES, LLC
D/B/A R-SQUARED GLOBAL, LLC
510 TRENTON ST.
WEST MONROE, LA 71291
318-323-6900 OFFICE
JOB No. OXY_0020_CS
SHEET 1 OF 3



SITE PLAN

CHUCK SMITH MDP1 8_17 FED COM (SNDDNS_T24SR31E_0509)

SEC. 5 TWP. 24-S RGE. 31-E

SURVEY: N.M.P.M.

COUNTY: EDDY

OPERATOR: OXY USA, INC.

U.S.G.S. TOPOGRAPHIC MAP: BIG SINKS, N.M.

FAA PERMIT NEEDED: NO

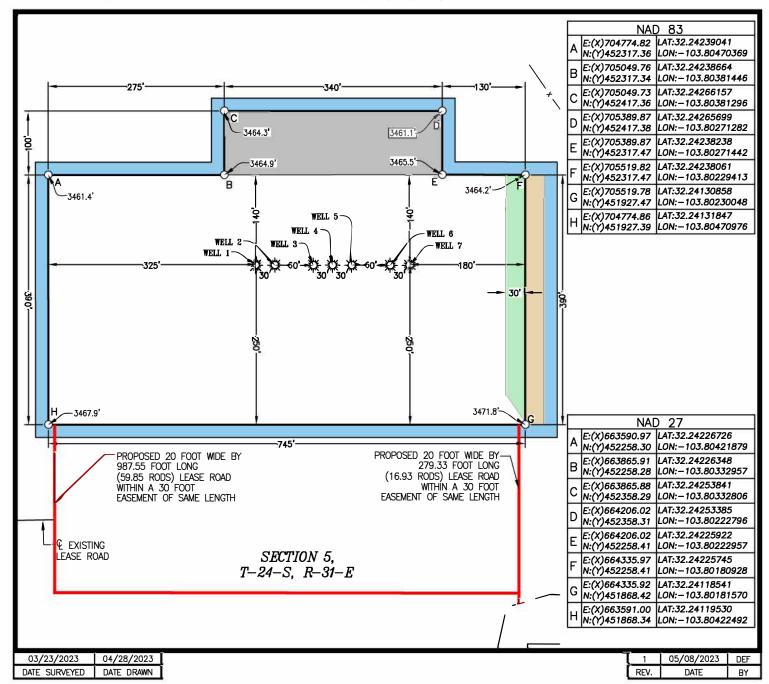
TANK BATTERY
RECLAMATION

30' TOP SOIL

20' DISTURBANCE AREA

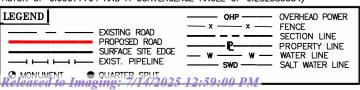


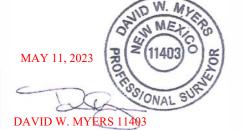
5' 0' 75' 150' SCALE: 1" = 150'



BASIS_OF_BEARING

ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. (ALL BEARINGS, DISTANCES, COORDINATES AND AREAS ARE GRID MEASUREMENTS UTILIZING A COMBINED SCALE FACTOR OF 0.99977704 AND A CONVERGENCE ANGLE OF 0.282383333.)







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SHEET 2 OF 3



SITE PLAN

CHUCK SMITH MDP1 8_17 FED COM (SNDDNS_T24SR31E_0509)

SEC. 5 TWP. 24-S RGE. 31-E

SURVEY: N.M.P.M.

COUNTY: EDDY

OPERATOR: OXY USA, INC.

U.S.G.S. TOPOGRAPHIC MAP: BIG SINKS, N.M.

FAA PERMIT NEEDED: NO



WELL 1 CHUCK SMITH MDP1 8_17 FED COM 35H OXY USA, INC. 1050' FSL 1460' FWL, SECTION 5

1050' FSL 1460' FWL, SECTION 5
NAD 83, SPCS NM EAST
X:705099.74' / Y:452177.42'
LAT:32.24200135N / LON:103.80365502W
NAD 27, SPCS NM EAST
X:663915.89' / Y:452118.36'
LAT:32.24187819N / LON:103.80317016W
ELEVATION = 3467'

WELL 2 CHUCK SMITH MDP1 8_17 FED COM 36H OXY USA, INC.

1050' FSL 1490' FWL, SECTION 5

NAD 83, SPCS NM EAST

X:705129.89' / Y:452177.32'

LAT:32.24200067N / LON:103.80355752W

NAD 27, SPCS NM EAST

X:663946.03' / Y:452118.26'

LAT:32.24187751N / LON:103.80307267W

ELEVATION = 3467'

WELL 3 CHUCK SMITH MDP1 8_17 FED COM 61H OXY USA, INC.

1050' FSL 1550' FWL, SECTION 5

NAD 83, SPCS NM EAST

X:705189.83' / Y:452177.37'

LAT:32.24199999N / LON:103.80336364W

NAD 27, SPCS NM EAST

X:664005.98' / Y:452118.31'

LAT:32.24187683N / LON:103.80287880W

ELEVATION = 3467'

WELL 4 CHUCK SMITH MDP1 8_17 FED COM 62H OXY USA, INC. 1050' FSL 1580' FWL, SECTION 5

1050' FSL 1580' FWL, SECTION 5

N4D 83, SPCS NM EAST

X:705219.75' / Y:452177.48'

LAT:32.2419987N / LON:103.80326686W

N4D 27, SPCS NM EAST

X:664035.90' / Y:452118.42'

LAT:32.24187671N / LON:103.80278202W

ELEVATION = 3467'

WELL 5 CHUCK SMITH MOP1 8_17 FED COM 63H OXY USA. INC:

OXY USA, INC.

1050' FSL 1610' FWL, SECTION 5

NAD 83, SPCS NM EAST

X:705249.78' Y:452177.48'

LAT:32.24199949N / LON:103.80316974W

NAD 27, SPCS NM EAST

X:664065.93' / Y:452118.43'

LAT:32.24187633N / LON:103.80268489W

ELEVATION = 3467'

WELL 6 CHUCK SMITH MOP1 8_17 FED COM 51H OXY USA, INC.

1049' FSL 1670' FWL, SECTION 5
NAD 83, SPCS NM EAST
X:705309.82' / Y:452177.36'
LAT:32.24199833N / LON:103.80297557W
NAD 27, SPCS NM EAST
X:664125.96' / Y:452118.30'
LAT:32.24187517N / LON:103.80249074W
ELEVATION = 3467'

WELL 7 CHUCK SMITH MOP1 8_17 FED COM 52H OVY USA INC.

OXY USA, INC.

1049' FSL 1700' FWL, SECTION 5

N40 83, SPCS NM EAST

X:705339.81' / Y:452177.44'

LAT:32.24199814N / LON:103.80287855W

N40 27, SPCS NM EAST

X:664155.96' / Y:452118.38'

LAT:32.24187497N / LON:103.80239371W

ELEVATION = 3467'

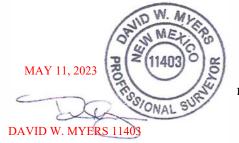
03/23/2023	04/28/2023	
DATE SURVEYED	DATE DRAWN	

1	05/08/2023	DEF
REV.	DATE	BY

BASIS OF BEARING

ALL BEARINGS AND COORDINATES REFER TO NAD 83, NEW MEXICO STATE PLANE COORDINATE SYSTEM, EAST ZONE, U.S. SURVEY FEET. (ALL BEARINGS, DISTANCES, COORDINATES AND AREAS ARE GRID MEASUREMENTS UTILIZING A COMBINED SCALE FACTOR OF 0.99977704 AND A CONVERGENCE ANGLE OF 0.282383333.)

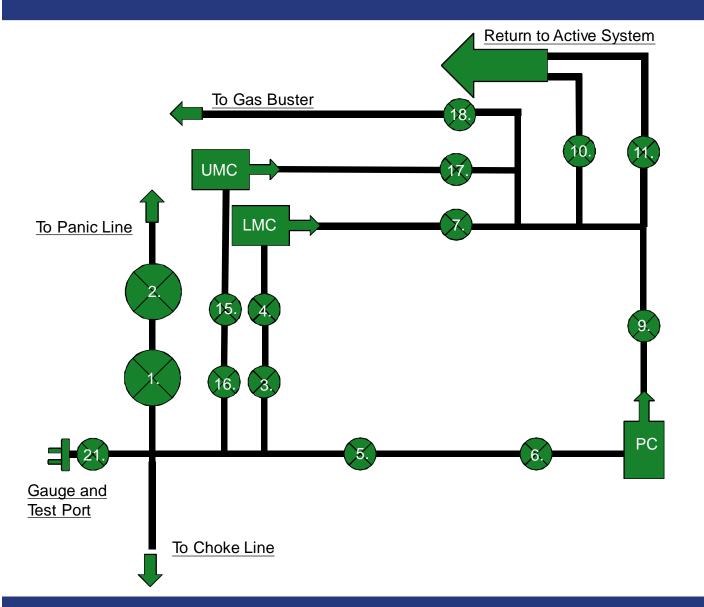






PREPARED BY:
DELTA FIELD SERVICES, LLC
D/B/A R-SQUARED GLOBAL, LLC
510 TRENTON ST.
WEST MONROE, LA 71291
318-323-6900 OFFICE
JOB No. OXY_0020_CS
SHIERT 3 OF 3

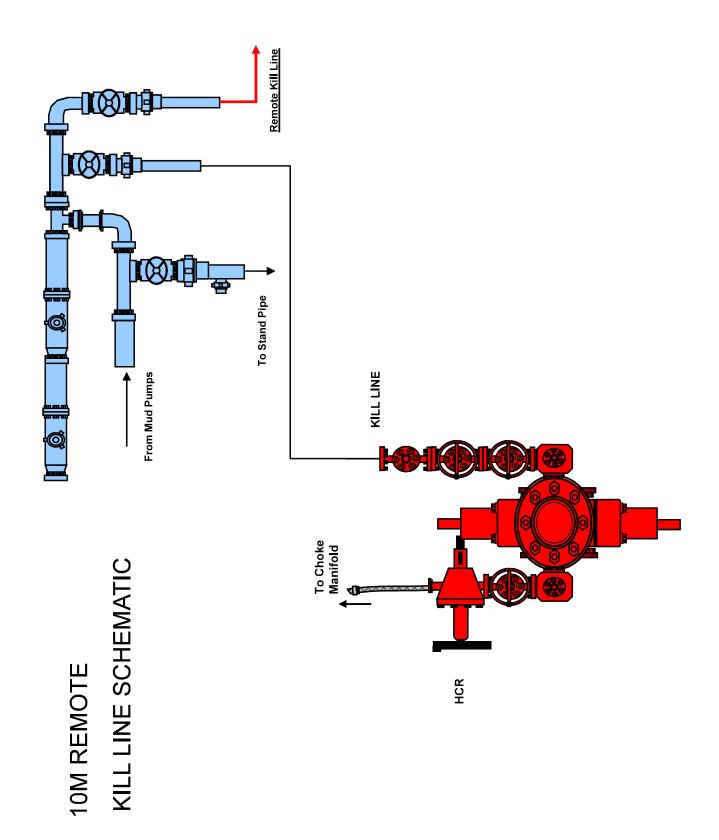
10M Choke Panel

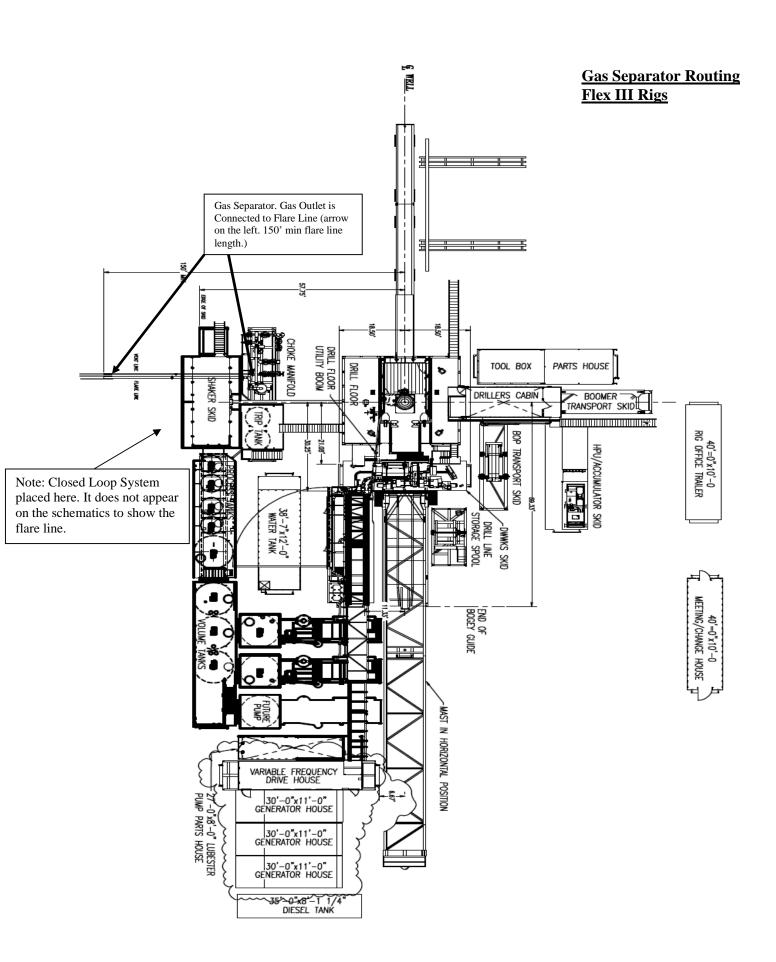


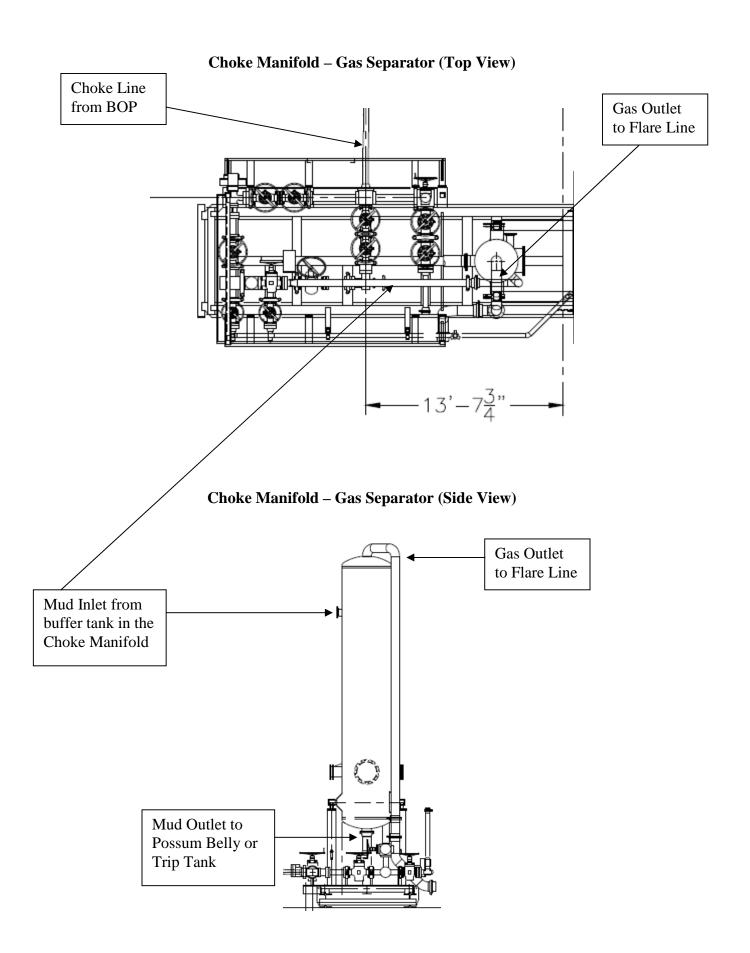
- 1. Choke Manifold Valve
- 2. Choke Manifold Valve
- 3. Choke Manifold Valve
- 4. Choke Manifold Valve
- 5. Choke Manifold Valve
- 6. Choke Manifold Valve
- 7. Choke Manifold Valve
- 8. PC Power Choke
- 9. Choke Manifold Valve
- 10. Choke Manifold Valve
- 11. Choke Manifold Valve
- 12. LMC Lower Manual Choke
- 13. UMC Upper manual choke
- 15. Choke Manifold Valve
- 16. Choke Manifold Valve
- 17. Choke Manifold Valve
- 18. Choke Manifold Valve
- 21. Vertical Choke Manifold Valve

*All Valves 3" minimum

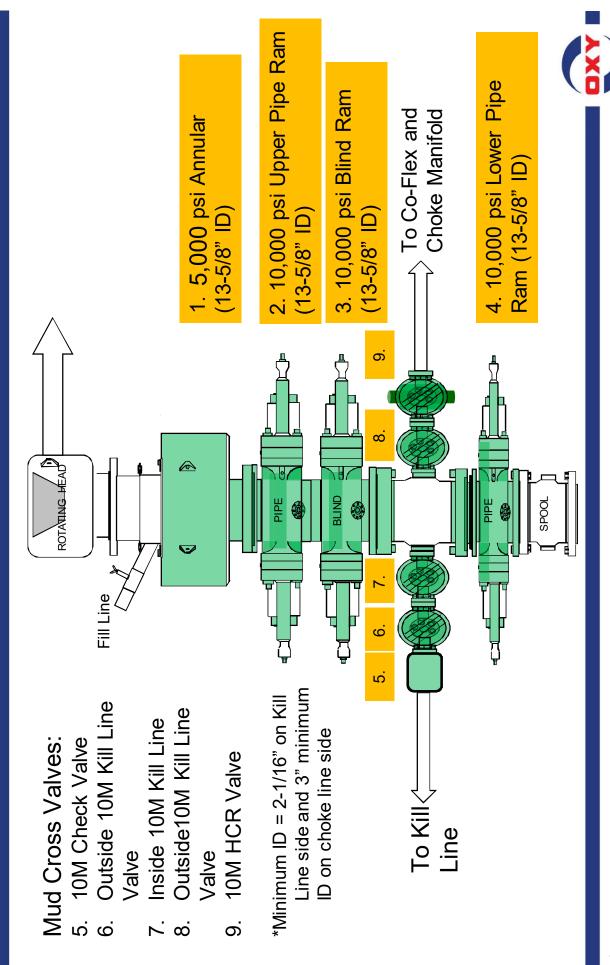








5/10M BOP Stack



Sante Fe Main Office Phone: (505) 476-3441

General Information Phone: (505) 629-6116

Online Phone Directory https://www.emnrd.nm.gov/ocd/contact-us

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

CONDITIONS

Action 470421

CONDITIONS

Operator:	OGRID:
OXY USA INC	16696
P.O. Box 4294	Action Number:
Houston, TX 772104294	470421
	Action Type:
	[C-101] BLM - Federal/Indian Land Lease (Form 3160-3)

CONDITIONS

Created By	Condition	Condition Date
melissaguidry	Cement is required to circulate on both surface and intermediate1 strings of casing.	6/3/2025
melissaguidry	If cement does not circulate on any string, a Cement Bond Log (CBL) is required for that string of casing.	6/3/2025
ward.rikala	Notify the OCD 24 hours prior to casing & cement.	7/14/2025
ward.rikala	File As Drilled C-102 and a directional Survey with C-104 completion packet.	7/14/2025
ward.rikala	Once the well is spud, to prevent ground water contamination through whole or partial conduits from the surface, the operator shall drill without interruption through the fresh water zone or zones and shall immediately set in cement the water protection string.	7/14/2025
ward.rikala	Oil base muds are not to be used until fresh water zones are cased and cemented providing isolation from the oil or diesel. This includes synthetic oils. Oil based mud, drilling fluids and solids must be contained in a steel closed loop system.	7/14/2025