13-302

OCD Artesia

Form 3160-3
(August 2007)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

R-111-POTASH

RESUBMITTAL

FORM APPROVED
OMB No. 1004-0136
Expires July 31, 2010

TCP 7/10/2013

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work: ☒ DRILL ☐ REENTER	5. Lease Serial No. NMNM25876
	6. If Indian, Allottee or Tribe Name
	7. If Unit or CA Agreement, Name and No.
1b. Type of Well: ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone	8. Lease Name and Well No. GETTY 24 FEDERAL 12H <29747>
2. Name of Operator CHEVRON U.S.A. INC. Contact: DENISE PINKERTON E-Mail: leakejd@chevron.com <43237>	9. API Well No. 30-015-41522
3a. Address 15 SMITH ROAD MIDLAND, TX 79705	3b. Phone No. (include area code) Ph: 432-687-7375
	10. Field and Pool, or Exploratory LIVINGSTON RIDGE DELAWARE <39360>
4. Location of Well *(Report location clearly and in accordance with any State requirements.)* At surface 330FNL 590FWL At proposed prod. zone 330FNL 590FWL	11. Sec., T., R., M., or Blk. and Survey or Area Sec 24 T22S R31E Mer NMP
14. Distance in miles and direction from nearest town or post office* 29 MILES EAST OF CARLSBAD, NM	12. County or Parish EDDY / 13. State NM
15. Distance from proposed location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 330'	16. No. of Acres in Lease 640.00 / 17. Spacing Unit dedicated to this well 40.00
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1162' TO GETTY 24 FEDERAL #10	19. Proposed Depth 8383 MD 8383 TVD / 20. BLM/BIA Bond No. on file CA0329
21. Elevations (Show whether DF, KB, RT, GL, etc. 3547 GL	22. Approximate date work will start / 23. Estimated duration

RECEIVED
JUL 09 2013
NMOCD ARTESIA

24. Attachments

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

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

25. Signature	Name (Printed/Typed)	Date
(Electronic Submission)	DENISE PINKERTON Ph: 432-687-7375	01/09/2013

Title: REGULATORY SPECIALIST

Approved by (Signature)	Name (Printed/Typed)	Date
/s/ Jesse J. Juen		JUL 1 2013
Title: STATE DIRECTOR	Office: NM STATE OFFICE	

Application approval does not warrant or certify 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.

APPROVAL FOR TWO YEARS

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.

Additional Operator Remarks (see next page)

Electronic Submission #179644 verified by the BLM Well Information System
For CHEVRON U.S.A. INC., sent to the Carlsbad
Committed to AFMSS for processing by KURT SIMMONS on 01/09/2013 ()

Carlsbad Controlled Water Basin

Approval Subject to General Requirements & Special Stipulations Attached

SEE ATTACHED FOR CONDITIONS OF APPROVAL

**** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ** OPERATOR-SUBMITTED ****

Additional Operator Remarks:

PLEASE FIND ATTACHMENT FOR:
WELL LOCATION & PIPELINE SURVEYS
9 POINT DRILLING PLAN
RIG & BOP
BOP & CHOKE DIAGRAM & VALVE SCHEMATIC
BOP/CHOKE HOSE INFO
SURFACE USE PLAN
INTERIM RECLAMATION MAP
WELLS WITHIN 1-MILE RADIUS
DRILLING PAD LAYOUT

and
H2S CONTINGENCY PLAN

12. OPERATOR'S REPRESENTATIVE

Darrell Hammons
Drilling Manager
1400 Smith
Houston, Texas 77002
Office Phone: 713-372-5747

CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in the plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Chevron U.S.A. Inc. and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

12-14-2012
Date

Darrell Hammons
Drilling Manager
Houston, Texas

DISTRICT I
1625 N. French Dr., Hobbs, NM 88240
Phone: (575) 393-6161 Fax: (575) 393-0720
DISTRICT II
811 S. First St., Artesia, NM 88210
Phone: (575) 748-1283 Fax: (575) 748-9720
DISTRICT III
1000 Rio Brazos Road, Aztec, NM 87410
Phone: (505) 334-6178 Fax: (505) 334-6170
DISTRICT IV
1220 S. St. Francis Dr., Santa Fe, NM 87505
Phone: (505) 476-3460 Fax: (505) 476-3462

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

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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

API Number	Pool Code	Pool Name	
30-015-41522	39360	Livingston Ridge, Delaware	
Property Code	**Property Name**		**Well Number**
29747	GETTY 24 FEDERAL		12
OGRID No.	**Operator Name**		**Elevation**
4323	CHEVRON USA, INC		3547'

Surface Location

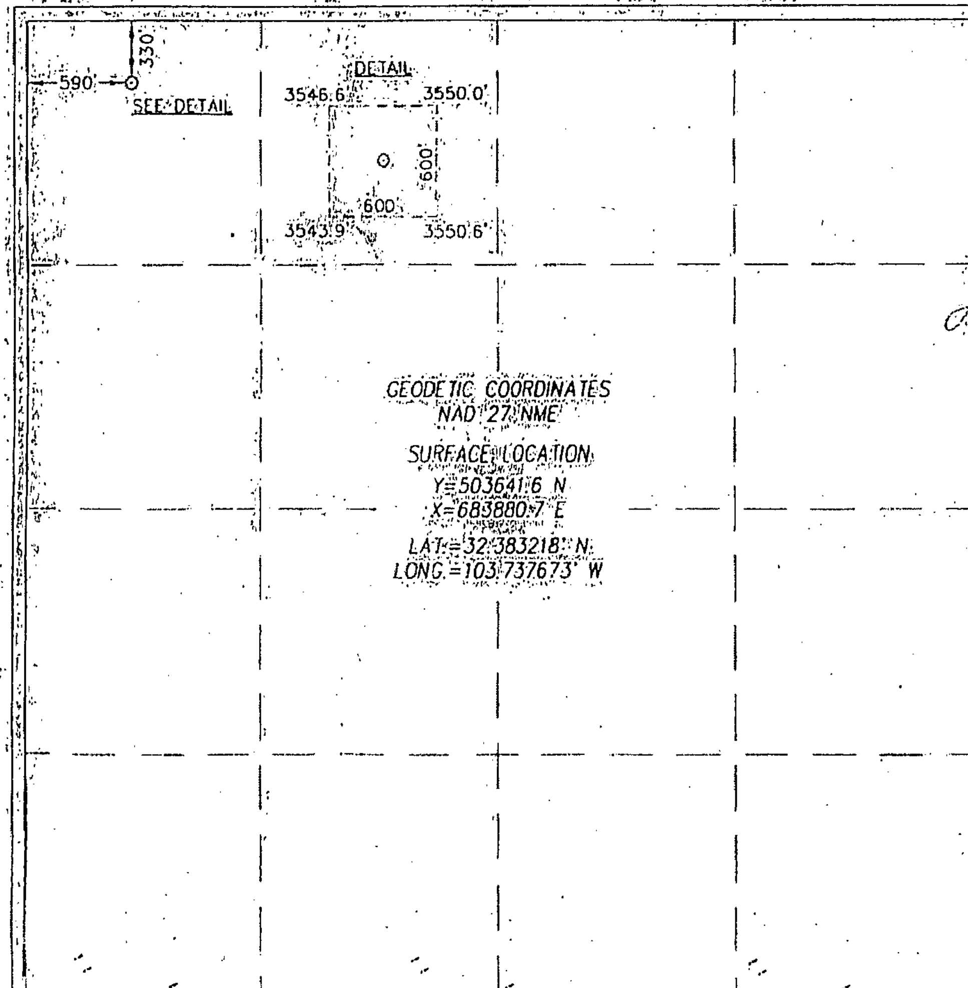
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
D	24	22-S	31-E		330	NORTH	590	WEST	EDDY

Bottom Hole Location If Different From Surface

UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

Dedicated Acres	Joint or Infill	Consolidation Code	Order No.
40			2-1-13 8383

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



OPERATOR CERTIFICATION

I hereby certify that the information herein is true and complete to the best of my knowledge and belief, and 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 such mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.

Denise Pinkerton 12-14-2012
Signature Date

Denise Pinkerton
Printed Name

leakejd@chevron.com
E-mail Address

SURVEYOR CERTIFICATION

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

MAY 10 2012
Date of Survey
Signature & Seal of Professional Surveyor:

GARY G. EIDSON
NEW MEXICO
12641
REGISTERED PROFESSIONAL SURVEYOR

Gary G. Eidson 5/11/12

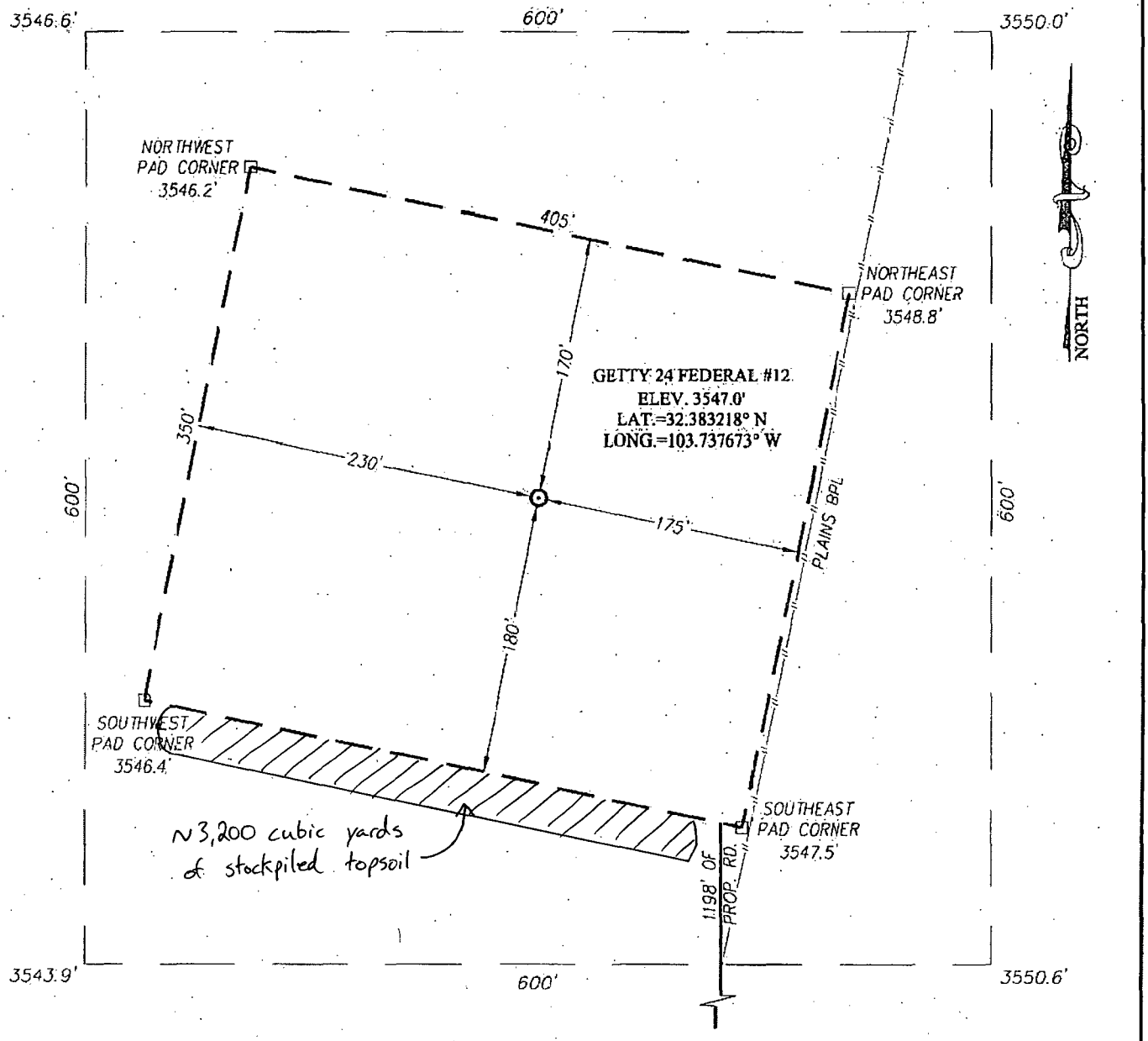
Certificate Number Gary G. Eidson 12641
Ronald J. Eidson 3239

AF/DSS JWSC W.O.: 12.11.0654

35464

SECTION 24, TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M.

EDDY COUNTY NEW MEXICO



DIRECTIONS TO LOCATION

FROM THE INTERSECTION OF HWY. 62-180 AND CO. RD. C-29 (CAMPBELL RD.) GO SOUTH ON C-29 APPROX. 11.5 MILES. CONTINUE ON CAMPBELL VEERING RIGHT APPROX. 1.5 MILES, VEERING BACK LEFT AND HEADING SOUTH. AT THE CATTLE GUARD, THE ROAD CHANGES TO CO. RD. 798 (RED ROAD). CONTINUE SOUTH ON RED ROAD APPROX. 0.4 MILES. TURN LEFT AND GO EAST APPROX. 0.2 MILES. TURN LEFT AND GO NORTH APPROX. 0.1 MILES TO A PROPOSED ROAD SURVEY. FOLLOW ROAD SURVEY STAKES NORTH APPROX. 1198 FEET TO THIS LOCATION.

TN 3/11/13

100 0 100 200 Feet

Scale: 1"=100'

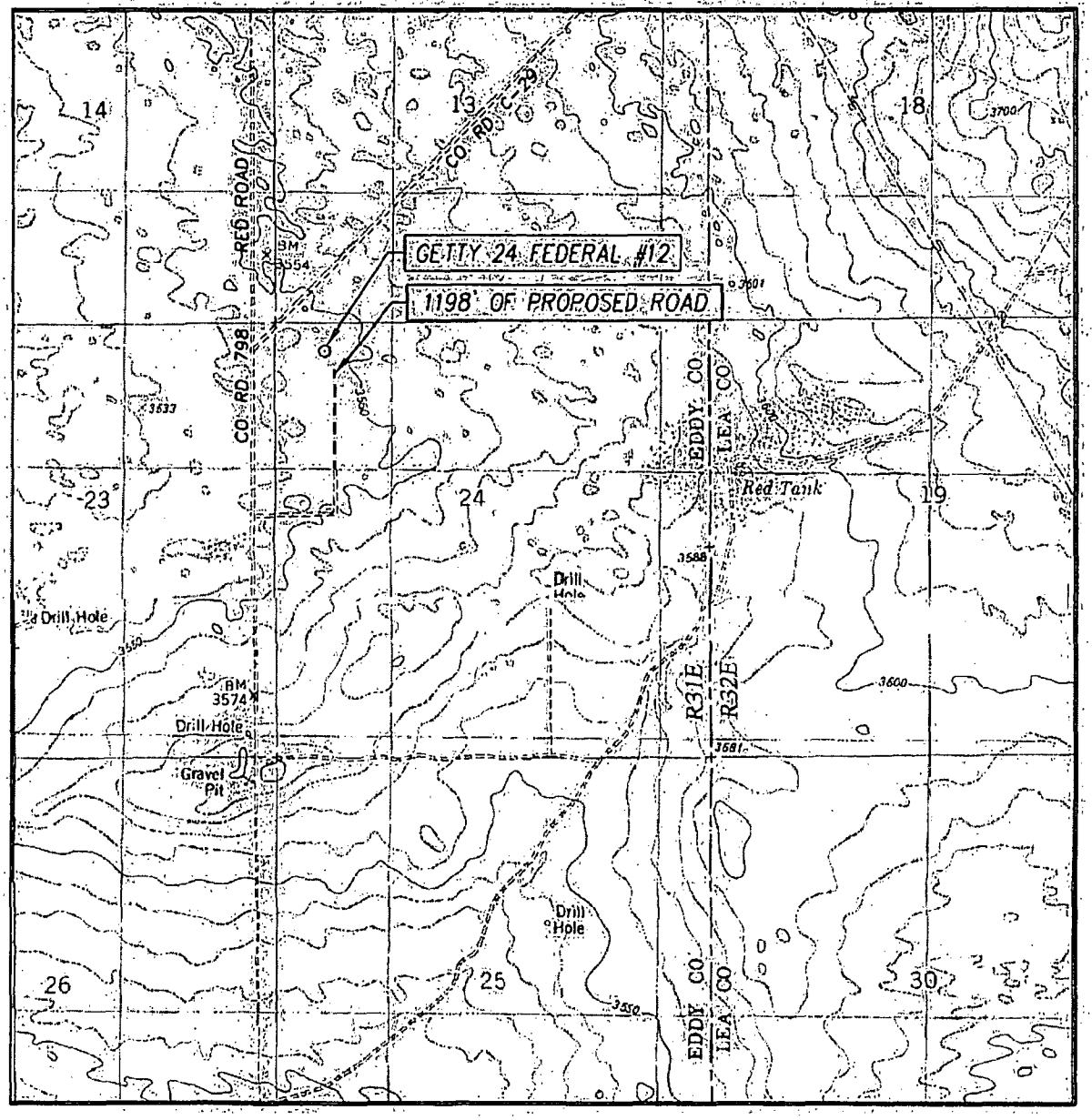
CHEVRON USA, INC.

GETTY 24 FEDERAL #12 WELL
LOCATED 330 FEET FROM THE NORTH LINE
AND 590 FEET FROM THE WEST LINE OF SECTION 24,
TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY, NEW MEXICO

Survey Date: 5/10/12	CAD Date: 5/25/12	Drawn By: AF
W.O. No.: 12110654	Rev: .	Rel. W.O.:	Sheet 1 of 1

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz

LOCATION VERIFICATION MAP



NORTH

SCALE: 1" = 2000'

CONTOUR INTERVAL:
THE DIVIDE, N.M. – 10'
BOOTLEG RIDGE, N.M. – 10'

SEC. 24 TWP. 22-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 330' FNL & 590' FWL

ELEVATION 3547'

OPERATOR CHEVRON USA, INC.

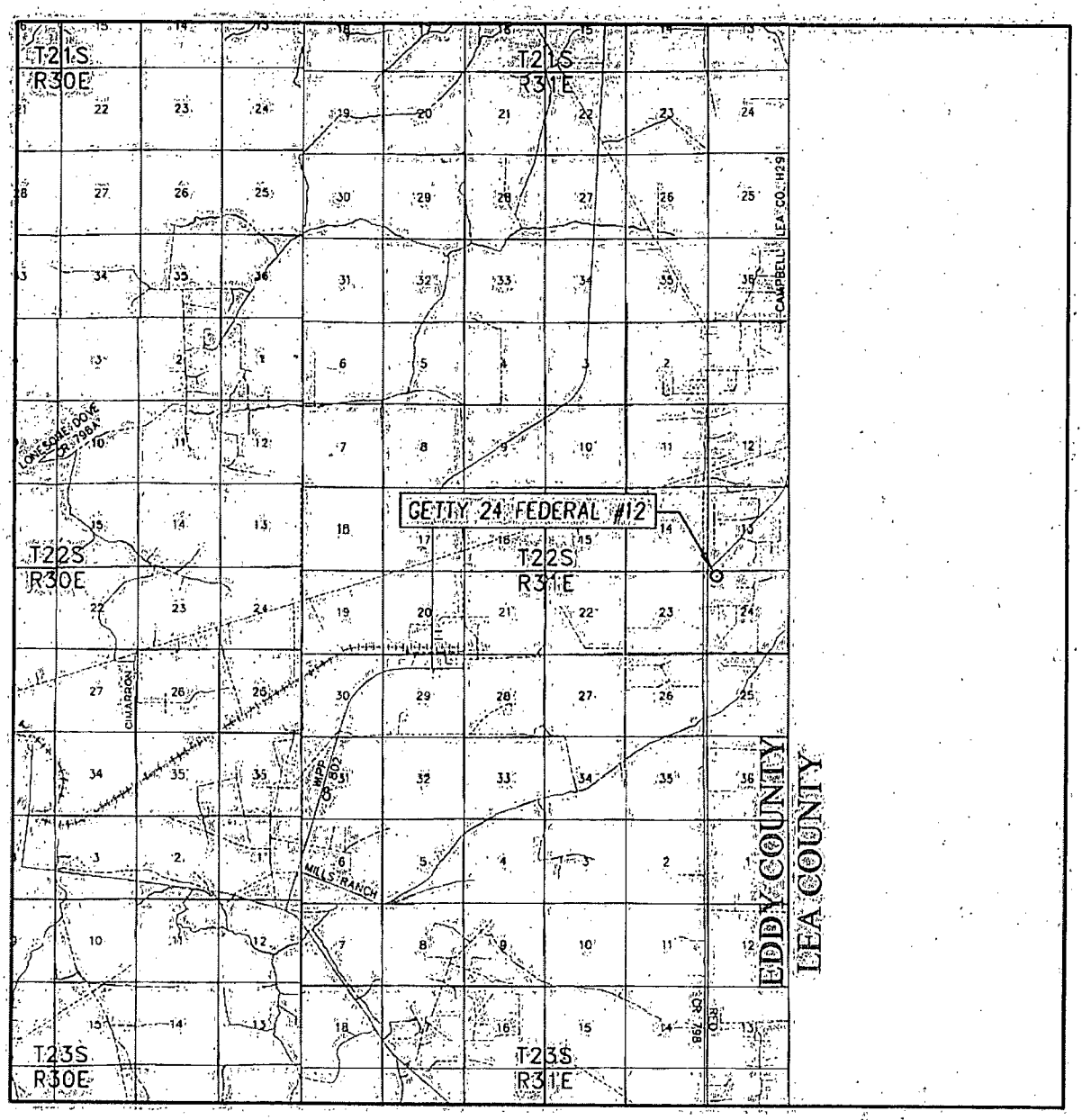
LEASE GETTY 24 FEDERAL

U.S.G.S. TOPOGRAPHIC MAP
THE DIVIDE, N.M.

Exhibit A

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117 www.wsc.biz

VICINITY MAP



SCALE: 1" = 2 MILES

SEC. 24 TWP. 22-S RGE. 31-E

SURVEY N.M.P.M.

COUNTY EDDY STATE NEW MEXICO

DESCRIPTION 330' FNL & 590' FWL

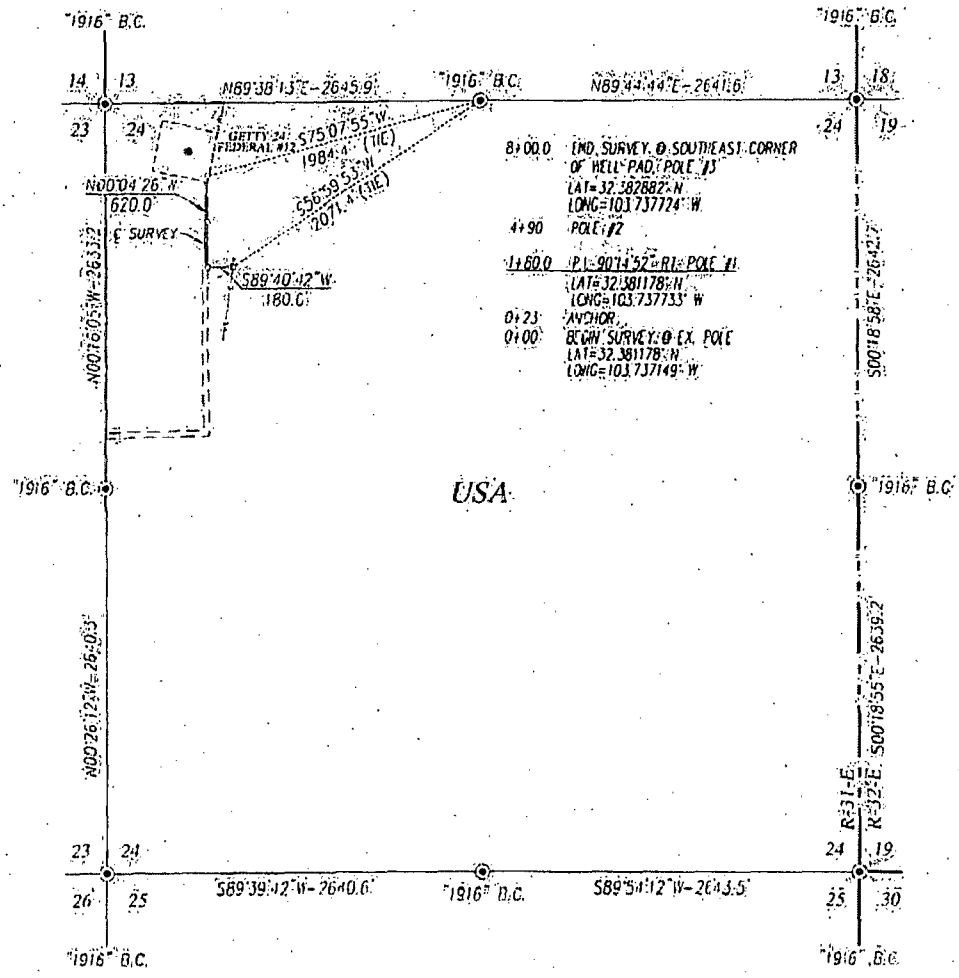
ELEVATION 3547'

OPERATOR CHEVRON USA, INC

LEASE GETTY 24 FEDERAL

PROVIDING SURVEYING SERVICES
SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz

SECTION 24, TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY NEW MEXICO



DESCRIPTION

SURVEY OF A STRIP OF LAND 50.0 FEET WIDE AND 800.0 FEET OR 0.152 MILES IN LENGTH, CROSSING USA LAND IN SECTION 24, T22S, R31E, N.M.P.M., EDDY COUNTY, NEW MEXICO, AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

NOTE

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM, NEW MEXICO EAST ZONE, NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

I, RONALD J. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 3239, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

RONALD J. EIDSON Ronald J. Eidson

DATE: 06/06/2012

NEW MEXICO 3239 PROFESSIONAL SURVEYOR

PROVIDING SURVEYING SERVICES SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz

LEGEND

⊙ DENOTES FOUND CORNER AS NOTED
⊗ DENOTES CALCULATED CORNER

1000 0 1000 2000 FEET
Scale: 1" = 1000'

CHEVRON USA INC

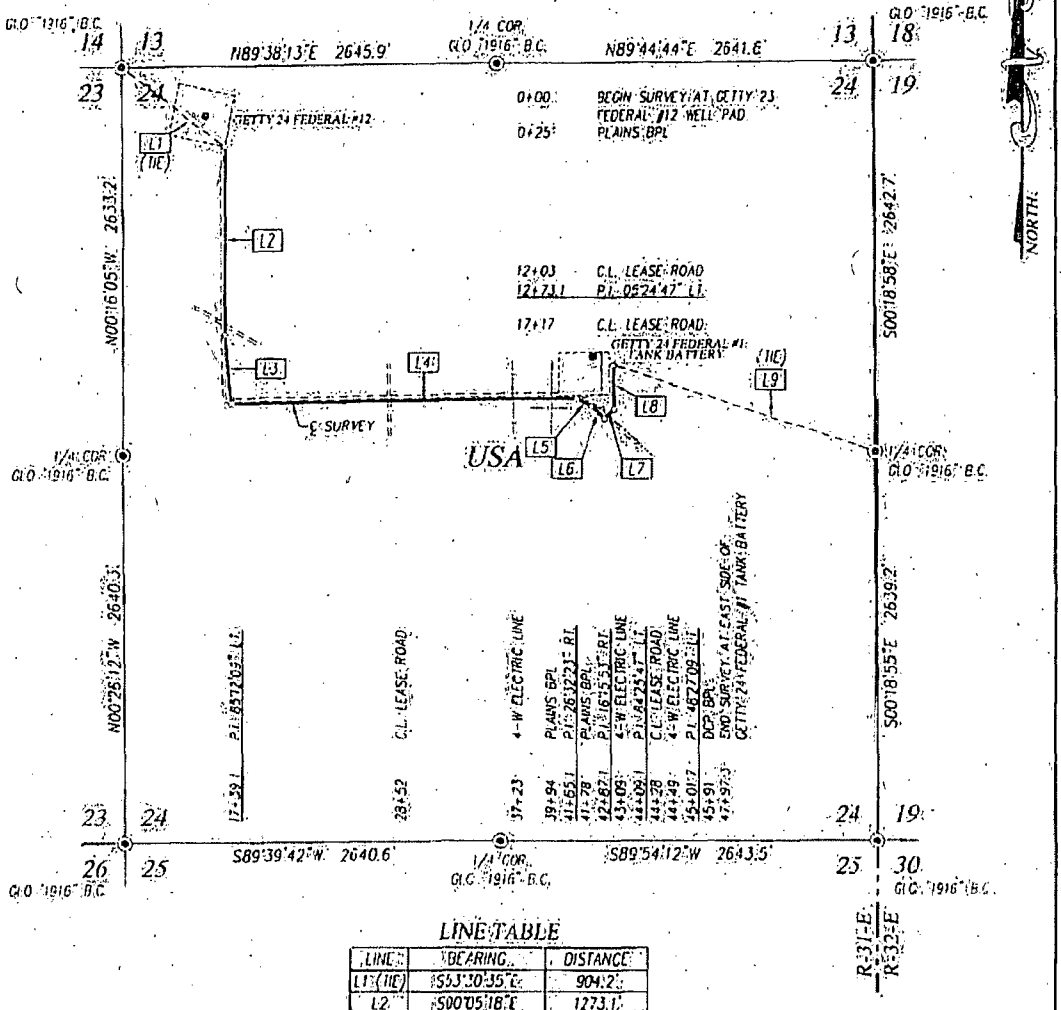
SURVEY OF A ELEC. LINE CROSSING SECTION 24, TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

Survey Date: 5/15/12	CAD Date: 5/25/12	Drawn By: AF
W.O. No.: 1211C951	Rev:	Rel. W.O.:

Sheet 1 of 1

Exhibit C

SECTION 24, TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M.,
EDDY COUNTY NEW MEXICO



LINE TABLE

LINE	BEARING	DISTANCE
L1 (TIE)	S53°30'35"E	904.2'
L2	S00°05'18"E	1273.1'
L3	S05°30'05"E	466.0'
L4	N89°17'46"E	2426.0'
L5	S64°09'51"E	122.0'
L6	S47°53'58"E	122.0'
L7	N17°40'15"E	92.6'
L8	N00°46'54"W	295.6'
L9 (TIE)	N72°08'19"W	1930.8'

DESCRIPTION

SURVEY OF A STRIP OF LAND 50.0 FEET WIDE AND 4797.3 FEET OR 0.909 MILES IN LENGTH CROSSING USA LAND IN SECTION 24, TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO, AND BEING 25.0 FEET LEFT AND 25.0 FEET RIGHT OF THE ABOVE PLATTED CENTERLINE SURVEY.

NOTE

BEARINGS SHOWN HEREON ARE MERCATOR GRID AND CONFORM TO THE NEW MEXICO COORDINATE SYSTEM, NEW MEXICO EAST ZONE, NORTH AMERICAN DATUM 1983. DISTANCES ARE SURFACE VALUES.

I, GARY G. EIDSON, NEW MEXICO PROFESSIONAL SURVEYOR No. 12641, DO HEREBY CERTIFY THAT THIS SURVEY PLAT AND THE ACTUAL SURVEY ON THE GROUND UPON WHICH IT IS BASED WERE PERFORMED BY ME OR UNDER MY DIRECT SUPERVISION; THAT I AM RESPONSIBLE FOR THIS SURVEY; THAT THIS SURVEY MEETS THE MINIMUM STANDARDS FOR SURVEYING IN NEW MEXICO; AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

GARY G. EIDSON

DATE: 6/5/12

NEW MEXICO 12641 REGISTERED PROFESSIONAL SURVEYOR

PROUD TO SERVE YOU SINCE 1946
JOHN WEST SURVEYING COMPANY
412 N. DAL PASO
HOBBS, N.M. 88240
(575) 393-3117 www.jwsc.biz

LEGEND

◉ DENOTES FOUND CORNER AS NOTED.

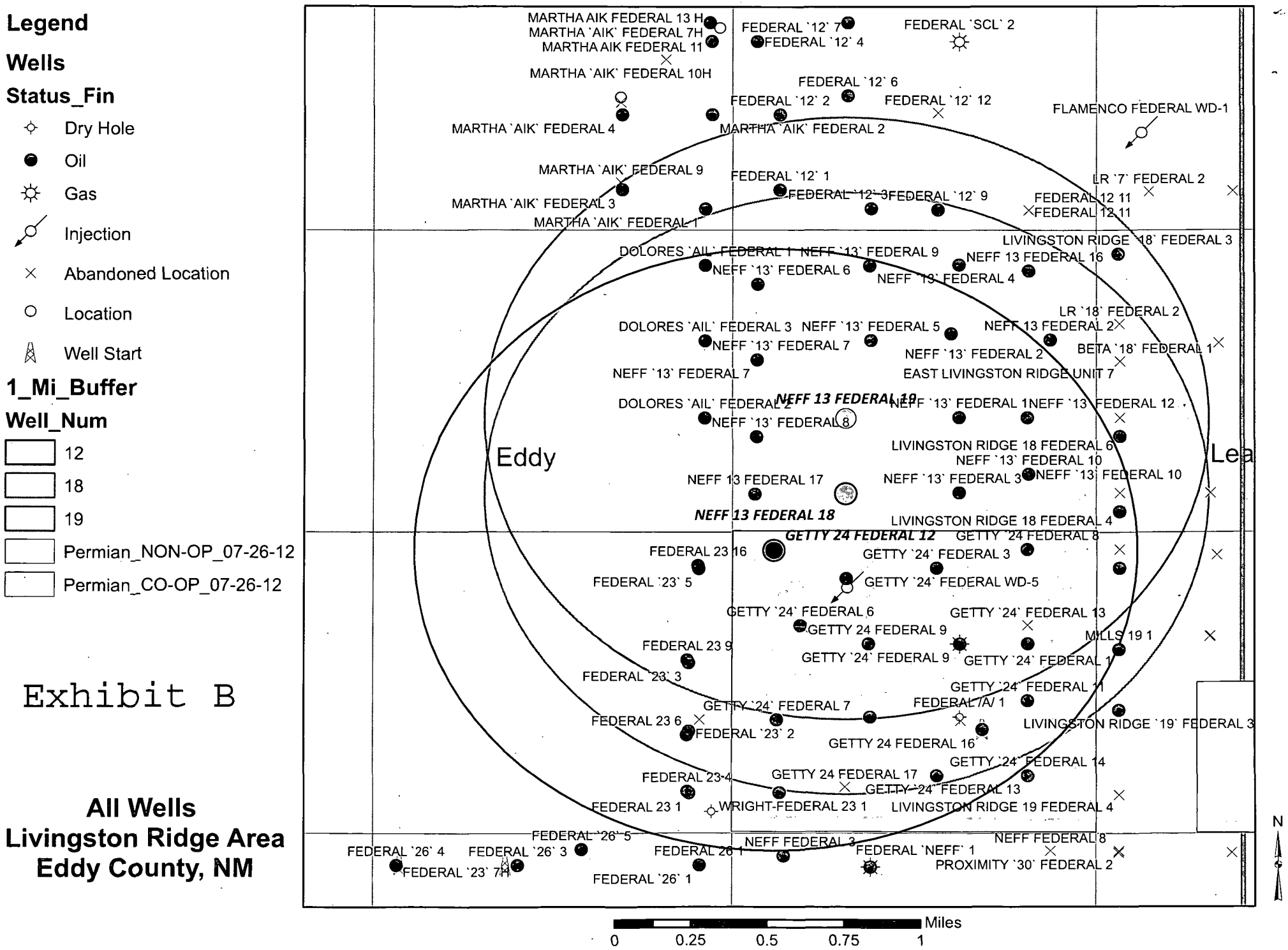
1000 0 1000 2000 FEET
Scale: 1" = 1000'

CHEVRON USA INC

SURVEY OF A PIPELINE CROSSING SECTION 24, TOWNSHIP 22 SOUTH, RANGE 31 EAST, N.M.P.M. EDDY COUNTY, NEW MEXICO

Survey Date: 5/17/12	CAD Date: 5/30/12	Drawn By: DSS
W.O. No.: 12110958	Rev.	Rel. W.O.:	Sheet 1 of 1

© K:\DRAFTING\Dennis\Easements\2012\12110958 Chevron Pipeline S24-T22 R31 Eddy


Legend
Wells
Status_Fin
Dry Hole
Oil
Gas
Injection
Abandoned Location
Location
Well Start
1_Mi_Buffer
Well_Num
12
18
19
Permian_NON-OP_07-26-12
Permian_CO-OP_07-26-12
Exhibit B
All Wells
Livingston Ridge Area
Eddy County, NM
MARTHA AIK FEDERAL 13 H
MARTHA `AIK` FEDERAL 7H
MARTHA AIK FEDERAL 11
MARTHA `AIK` FEDERAL 10H
FEDERAL `12` 7
FEDERAL `12` 4
FEDERAL `SCL` 2
FEDERAL `12` 6
FEDERAL `12` 2
FEDERAL `12` 12
FLAMENCO FEDERAL WD-1
MARTHA `AIK` FEDERAL 4
MARTHA `AIK` FEDERAL 2
MARTHA `AIK` FEDERAL 9
FEDERAL `12` 1
LR `7` FEDERAL 2
MARTHA `AIK` FEDERAL 3
FEDERAL `12` 3
FEDERAL `12` 9
FEDERAL 12 11
FEDERAL 12 11
MARTHA `AIK` FEDERAL 1
LIVINGSTON RIDGE `18` FEDERAL 3
DOLORES `AIL` FEDERAL 1
NEFF `13` FEDERAL 9
NEFF 13 FEDERAL 16
NEFF `13` FEDERAL 6
NEFF `13` FEDERAL 4
LR `18` FEDERAL 2
DOLORES `AIL` FEDERAL 3
NEFF `13` FEDERAL 5
NEFF 13 FEDERAL 2
NEFF `13` FEDERAL 7
BETA `18` FEDERAL 1
NEFF `13` FEDERAL 2
NEFF `13` FEDERAL 7
EAST LIVINGSTON RIDGE UNIT 7
NEFF 13 FEDERAL 19
DOLORES `AIL` FEDERAL 2
NEFF `13` FEDERAL 1
NEFF `13` FEDERAL 12
NEFF `13` FEDERAL 8
LIVINGSTON RIDGE 18 FEDERAL 6
Eddy
Lea
NEFF `13` FEDERAL 10
NEFF 13 FEDERAL 17
NEFF `13` FEDERAL 3
NEFF `13` FEDERAL 10
NEFF 13 FEDERAL 18
LIVINGSTON RIDGE 18 FEDERAL 4
GETTY 24 FEDERAL 12
GETTY `24` FEDERAL 8
FEDERAL 23 16
GETTY `24` FEDERAL 3
FEDERAL `23` 5
GETTY `24` FEDERAL WD-5
GETTY `24` FEDERAL 6
GETTY `24` FEDERAL 13
GETTY 24 FEDERAL 9
MILLS 19 1
FEDERAL 23 9
GETTY `24` FEDERAL 9
GETTY `24` FEDERAL 1
FEDERAL `23` 3
GETTY `24` FEDERAL 11
GETTY `24` FEDERAL 7
FEDERAL 7A/ 1
FEDERAL 23 6
FEDERAL `23` 2
LIVINGSTON RIDGE `19` FEDERAL 3
GETTY 24 FEDERAL 16
GETTY `24` FEDERAL 14
FEDERAL 23 4
GETTY 24 FEDERAL 17
GETTY `24` FEDERAL 13
FEDERAL 23 1
WRIGHT-FEDERAL 23 1
LIVINGSTON RIDGE 19 FEDERAL 4
FEDERAL `26` 5
NEFF FEDERAL 3
NEFF FEDERAL 8
FEDERAL `26` 4
FEDERAL `26` 3
FEDERAL 26 1
FEDERAL `NEFF` 1
PROXIMITY `30` FEDERAL 2
FEDERAL `23` 7H
FEDERAL `26` 1
N
Miles
0
0.25
0.5
0.75
1

9 Point Drilling Plan

Chevron U.S.A
Getty 24 Federal #12
Eddy County, New Mexico
Section 24, Twp. 22S, Rge. 31E
330' FNL and 590' FWL

1. Formation Tops

Formation	Depth
Rustler	775'
Top Salt	1,106'
Base Salt	4,413'
Lamar	4,413'
Bell Canyon	4,483'
Cherry Canyon	5,310'
Brushy Canyon	6,468'
Bone Spring LM	8,283'
TD	8,383'

2. Zones Containing Oil, Gas, Water, and Other Minerals

Geological Marker	Depth	Type
Bell Canyon	4,483	Oil/Gas/Water
Cherry Canyon	5,310	Oil/Gas/Water
Brushy Canyon	6,468	Oil/Gas/Water
Bone Spring LM	8,283	Oil/Gas/Water

Fresh water depth is above the Rustler. These sands will be protected by setting surface casing to the top of the Rustler and bringing surface casing cement to surface.

3. Blow-Out Prevention See COA

The wellhead system is an SH-2 multi-bowl design and all casing strings will land inside the casing head. The initial BOP test will occur prior to drilling out the 13-3/8" casing shoe. All tests will be done with a third party testing service. A test plug will be set in the wellhead to isolate the BOP and the wellhead for BOP testing. The test pressures are 250/5,000 psi for rams and 250/3,500 psi for annular (70% of working pressure) for 10 minutes. BOPE stack will be tested every 14-21 days. Pipe rams and blind rams will be operationally checked on each trip out of the hole. Upper and lower kelly cocks will be available at all times. A full opening stabbing valve and inside BOP with the appropriate connections will be on the drill floor at all times.

Surface Casing: 1,300 psi test pressure
Intermediate Casing: 1,500 psi test pressure
Casing Head: 13-3/8" SOW x 13-5/8" **5M (updated from 3M)**
~~**Casing Spool: 13-5/8" 3M x 11" 5M**~~
Tubing Head: 11" 5M x 7-1/16" 10M
BOPE: 13-5/8" 10M (double ram and single ram)
Annular: 13-5/8" 5M
13-5/8" 5M Rotating head
5M Choke Manifold (Updated from 10M)

Chevron requests a variance if H&P 227 is used to drill this well to use a co-flex line between the BOP and choke manifold.
Manufacturer: Continental ContiTech Beattie Co.
Serial Number: 62639
Length: 35'
Size: 3" ID
Ends – 3" coupling with 4-1/16" 10K API flange end
WP rating: 10,000 psi
Anchors required by manufacturer – No

4. Casing Program

The operator proposes to drill a vertical well in the Bushy Canyon. We will drill a 17-1/2" hole to 825' and 13-3/8", 48#, H-40 casing will be run and cemented to surface. After sufficient W.O.C. time, an 11" hole will be drilled to 5,000' and 8-5/8", 32#, J-55 casing will then be run and cemented to surface. After sufficient W.O.C. time, a 7-7/8" hole will be drilled to 8,363' and OH logs will be run. The production hole will have 5-1/2", 17# L-80 (Updated from J-55). A DV tool is planned at 6,100'. All casing is new.

See COA

Hole Size	String	Csg Size	Wt	Grade	Conn	Depth	Burst	Collapse	Tension
17-1/2"	Surf	13-3/8"	48#	H-40	STC	~~825'~~ 850	4.1	2.2	9.4
11"	Int	8-5/8"	32#	J-55	LTC	5,000'	1.4	~~1.1~~ 1.16	~~1.3~~ 3.0
7-7/8"	Prod	5-1/2"	17#	~~J-55~~ L-80	LTC	Surface -8,363'	~~1.8~~ 2.7	~~1.3~~ 1.7	~~2.0~~ 2.7
DVT	Prod					~~3,700'&~~ 6,100'			

See COA

5. Cement Program

The cement volumes are approximate and are calculated on the assumption that a gauge hole will be achieved.
The surface and intermediate casing strings will have centralizers on the bottom 3 joints of casing (a minimum of one centralizer per joint) and then every 4th joint to surface. The casing shoe will not be drilled out until a minimum of 500 psi compressive strength is achieved. For the production hole, centralize the bottom three joints and across any potential pay.

See COA
min 24 hours in Potash

Casing	Slurry	Sacks	Density ppg	Yield ft3/sk	% Excess	TOC
13-3/8"	Class "C" with 2% CaCl2	815	14.8	1.34	100%	Surface
8-5/8" Lead	35/65 pozmix Class "H" with 6% gel + 5% salt + ¼ lb. cellophane flakes	833	12.8	1.94	50%	Surface
8-5/8" Tail	Class "H" neat	245	15.6	1.18	50%	4,240'
5-1/2" 1st Stage	50/50 pozmix Class "H" with 2% gel + 5% salt + 0.2% retarder + ¼ lb. cellophane flakes	402	14.2	1.35	35%	6,100'
5-1/2" 2nd Stage Lead	35/65 pozmix Class "H" with 6% gel + 5% salt + ¼ lb. cellophane flakes	~~195~~ 400	12.4	2.17	35%	~~3,700'~~ Surface

5-1/2" 2nd Stage Tail	50/50 pozmix Class "H" with 2% gel + 5% salt + ¼ lb. cellophane flakes	~~102~~ 417	14.2	1.35	35%	~~583'~~ 3,700'
~~5-1/2" 3rd Stage Lead~~	~~35/65 pozmix Class "H" with 6% gel + 5% salt + ¼ lb. cellophane flakes~~	~~487~~	~~12.4~~	~~2.17~~	~~35%~~	~~Surface~~
~~5-1/2" 3rd Stage Tail~~	~~50/50 pozmix Class "H" with 2% gel + 5% salt + ¼ lb. cellophane flakes~~	~~109~~	~~14.2~~	~~1.35~~	~~35%~~	~~3,248"~~

6. Circulating Medium

Visual monitoring will be used from surface to TD. Sufficient materials to maintain mud properties will be available on location while drilling. The cut brine will be mudded up for logging.

A mud test will be performed every 24 hrs after mudding up to monitor density, viscosity, gel strength, filtration, and pH. Circulating system will be monitored for losses/gains.

Interval	Mud Type	Density	Viscosity	Fluid Loss
0 – ~~825'~~ 850	FW/Spud mud	8.6 – 8.9	32 – 36	NC
~~825'~~ – ~~5,000'~~ 4412	Brine	10 – 10.1	28 – 30	NC
~~5,000~~ – 8,363'	Cut Brine	8.8 – 9.1	28 – 30	NC

7. Testing, Logging, and Coring See COA

Logs: Platform Express, Natural Gamma Ray Spectroscopy, High Resolution Laterolog Array, Borehole Compensated Sonic, and mud log all from TD to 4,400'.

DST's: None planned

Cores: None planned

8. Anticipated Pressures, Abnormal/Hazardous Drilling Conditions

Surface Hole:

Air blows possible around 600'

Intermediate Hole:

- Air pockets may be encountered in the shallow portion of the hole below surface
- Possible strong water flows with sour gas at +/-3300'

Production Hole:

Normal pressures and temperatures are expected to TD. Maximum anticipated bottom hole pressure is approximately 3,500 psi. Maximum bottom hole temperature is anticipated to be 129 degrees.

H2S is not anticipated; however it is still a potential hazard. H2S Safety equipment will be in operation prior to drilling out the surface shoe, pH will be maintained at 10+, and treat with H2S scavenger until the 5-1/2" is cemented in place.

Possible water flows at +/- 6000'

Possible lost circulation at 7200' to 8200'

9. Other Facets of the Proposal

Anticipated Start Date:	July 2013
Drilling Days:	22 days
Completion Days:	12 days

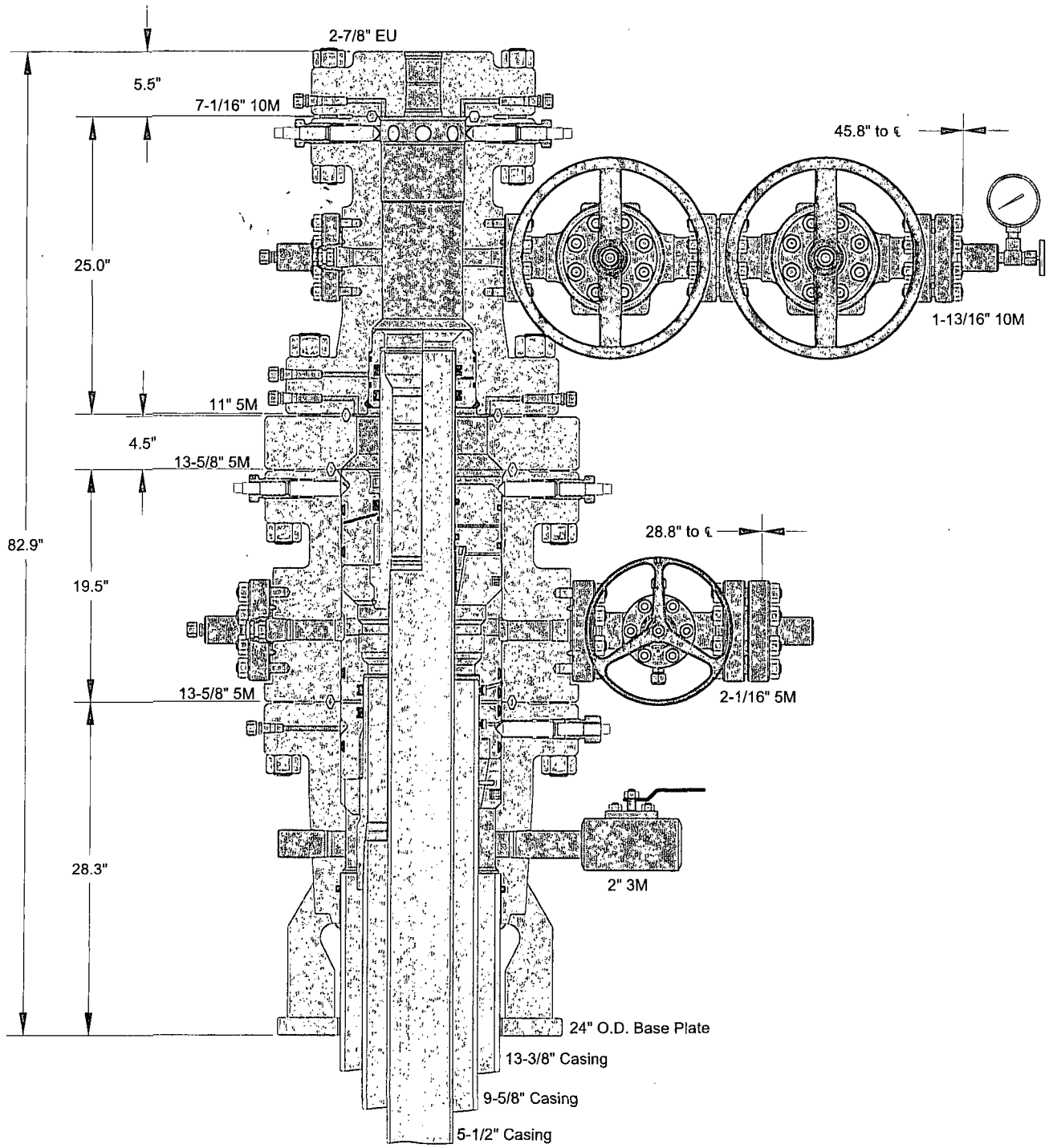
10. Operating and Maintenance Plan

- Cuttings will be discharged from shaker into cuttings bins/tanks
- Cuttings bins/tanks will be monitored so that it will not be overfilled
- The cuttings bins/tanks will be visually inspected for fluid integrity on a daily basis
- Documentation of fluid inspection will be captured on daily reports

11. Closure Plan

- Drilled cuttings will be removed from the cuttings bins/tanks using a backhoe and placed in a suitable transport container.
- Drilled cuttings will be disposed of at a suitable off-location waste facility

GE Oil & Gas

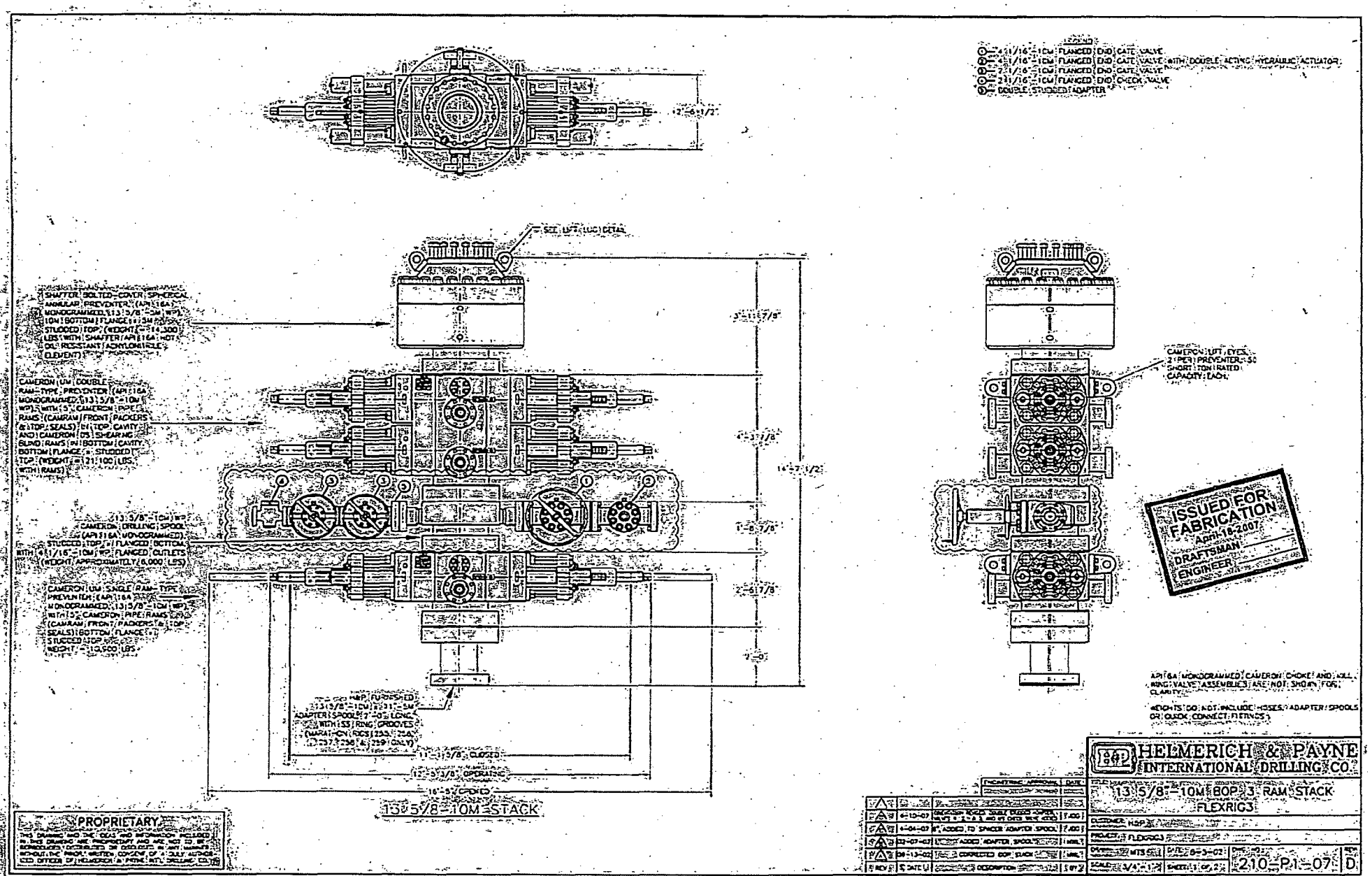


CHEVRON USA INC.
BONE SPRINGS

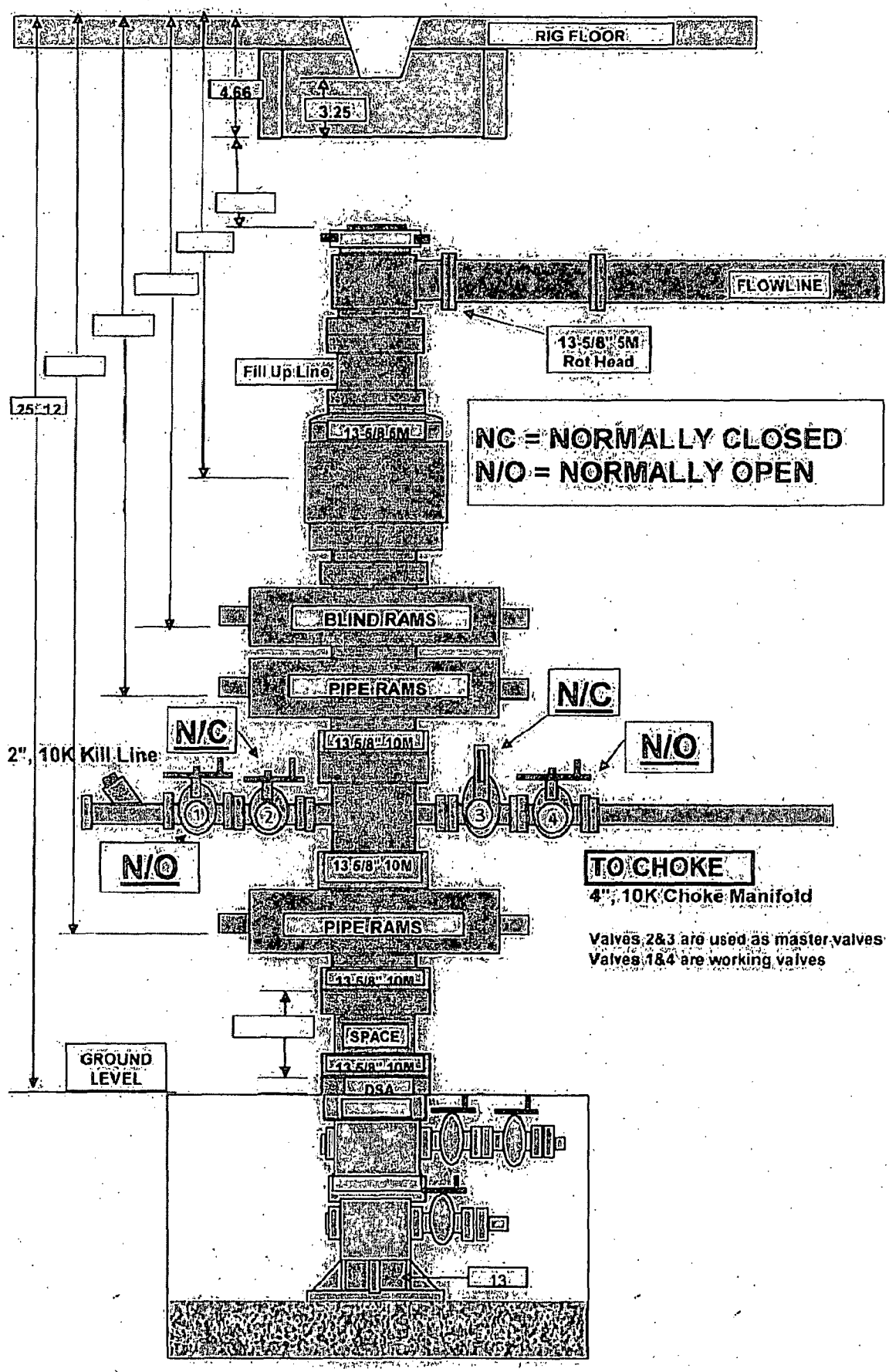
13-3/8" x 9-5/8" x 5-1/2" 10M SH2 Wellhead Assembly, With DSA, T-EBS-F Tubing Head and B5 Adapter Flange

DRAWN	JGR	03FEB12
APPRV	VJK	03FEB12

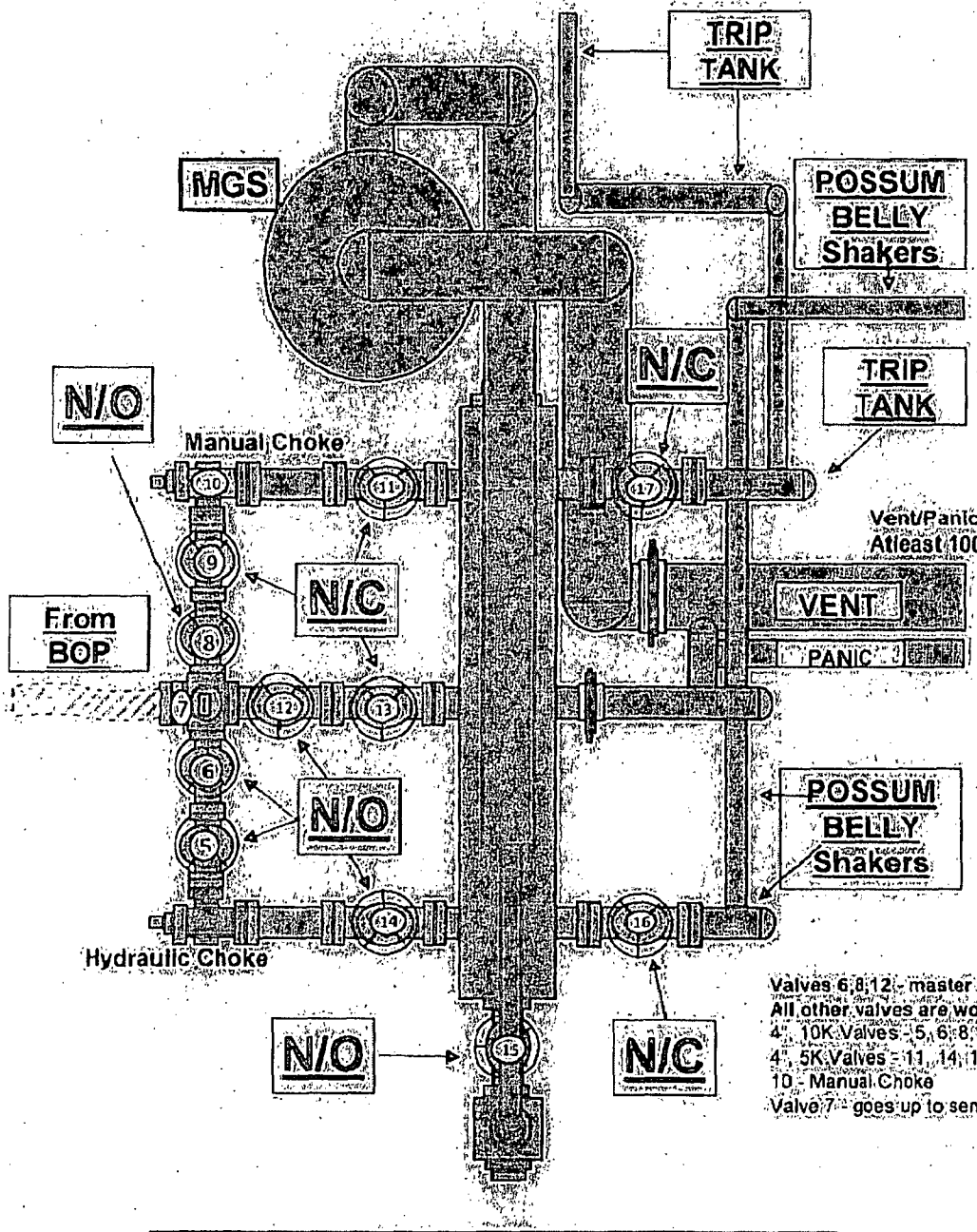
FOR REFERENCE ONLY
DRAWING NO. AE21317-A


13 5/8" - 10M BOP 3 RAM STACK
ISSUED FOR FABRICATION
APPR: 18-2007
DRAFTSMAN
ENGINEER
PROPRIETARY
HELMERICH & PAYNE INTERNATIONAL DRILLING CO.
FLEXRIG3
210-P1-07
D

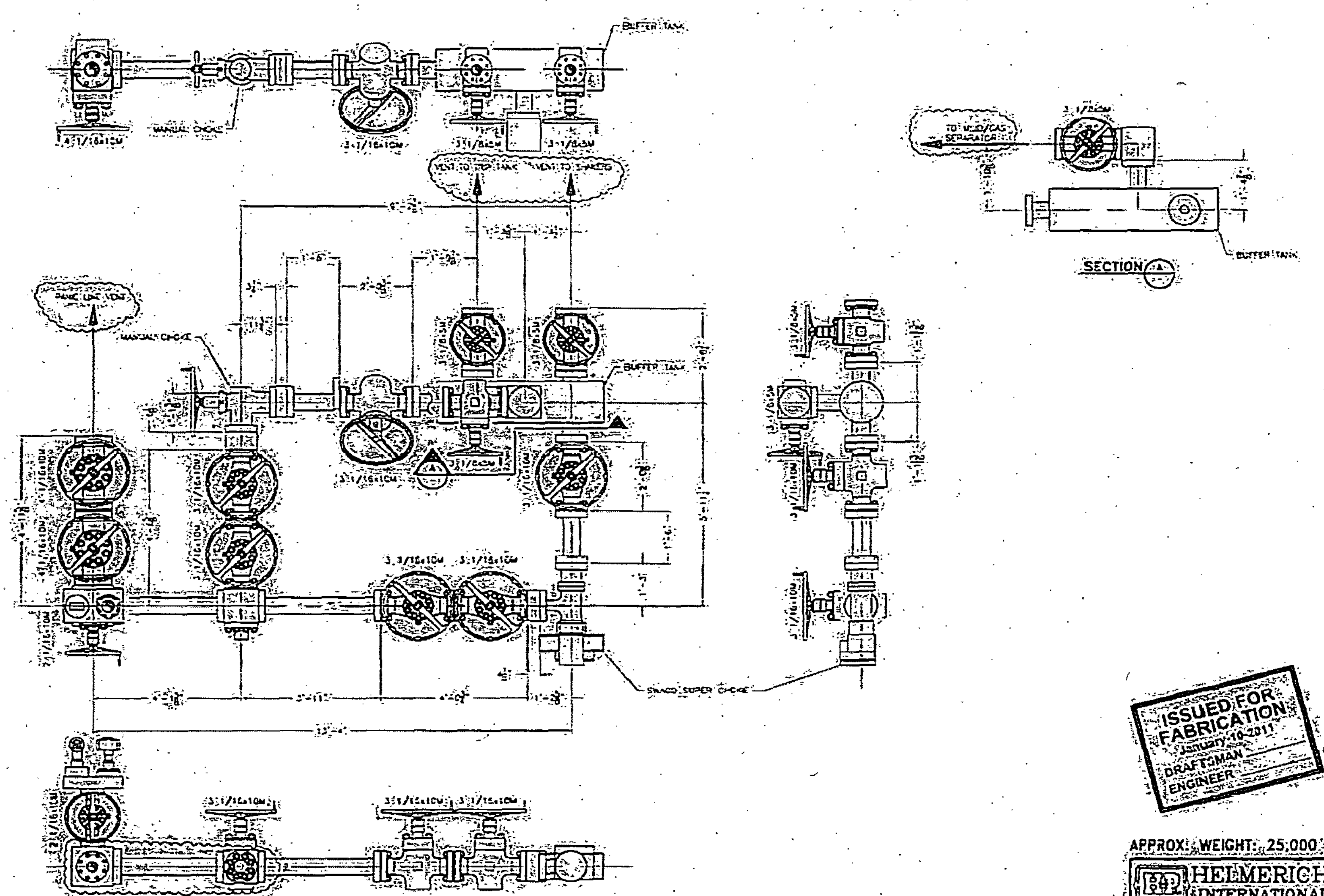
H&P 227 BOP Stack



H&P #227
CHOKE MANIFOLD



N/C = NORMALLY CLOSED
N/O = NORMALLY OPEN



APPROX. WEIGHT: 25,000 LBS

HELMERICH & PAYNE INTERNATIONAL DRILLING CO.

TITLE: CHOKE MANIFOLD

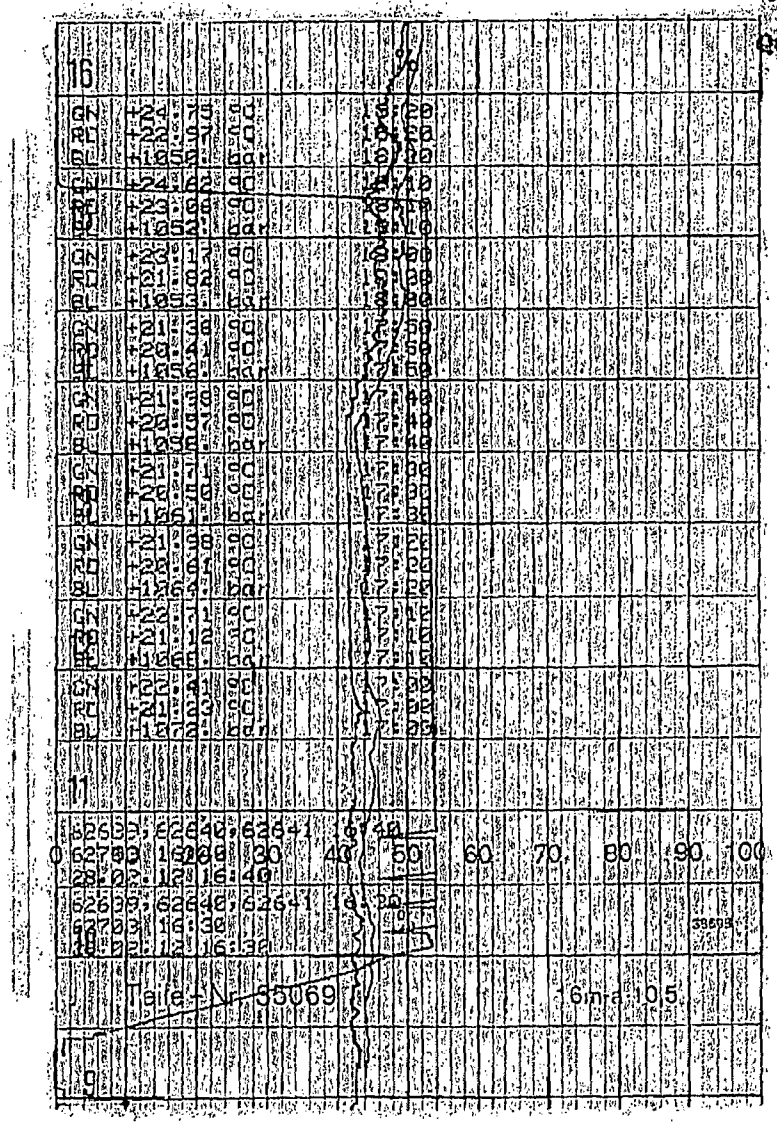
CUSTOMER: H&P

PROJECT: FLEXRIG3

REV	DATE	DESCRIPTION	BY
	1/10/11	LABELED LINES, CORRECTED CHOKE	
	10/13/03	ADJUST DIM TO FIELD CONFIRMED DIM	

DRAWN BY: MTS | DATE: 2-28-02 | DWG. NO.: 216-P1-05 | REV: B
SCALE: 3/4"=1'-0" | SHEET 1 OF 1

ContiTech Rubber Industrial Kft.
Quality Control Dept.
(1)



Continental CONTITECH

Certificate of Conformity

PA No	013134	Client	HELMERICH & PAYNE INT'L DRILLING	Cient Ref	RIG 227 DERRICK JOHNSO	Page	1

Part No	Description	Material Desc	Material Spec	Qty	WO No	Batch No	Test Cert No	Bin No	Drg No	Issue No
HP10CK3A 35' 4F1	3" 10K 16C C&K HOSE X 35ft OAL			1	5878	T231/62639				

We hereby certify that these goods have been inspected by our Quality Management System, and to the best of our knowledge are found to conform to relevant industry standards within the requirements of the purchase order as issued to ContiTech Beattie Corporation.

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE

CERT. N°: 310

PURCHASER:	ContiTech Beattie Co.	P.O. N°:	005878
CONTITECH ORDER N°:	529641	HOSE TYPE:	3" ID Choke and Kill Hose
HOSE SERIAL N°:	62639	NOMINAL / ACTUAL LENGTH:	10,67 m / 10,74 m

W.P.	68,9	MPa	10000	psi	T.P.	103,4	MPa	15000	psi	Duration:	60	min.

Pressure test with water at ambient temperature

See attachment. (1 page)

↑ 10 mm = 10 Min.

→ 10 mm = 20 MPa

COUPLINGS Type	Serial N°	Quality	Heat N°
3" coupling with 4 1/16" 10K API Flange end	1095 1090	AISI 4130 AISI 4130	B3785A 33051

NOT DESIGNED FOR WELL TESTING

API Spec 16 C

Temperature rate:"B"

All metal parts are flawless

WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

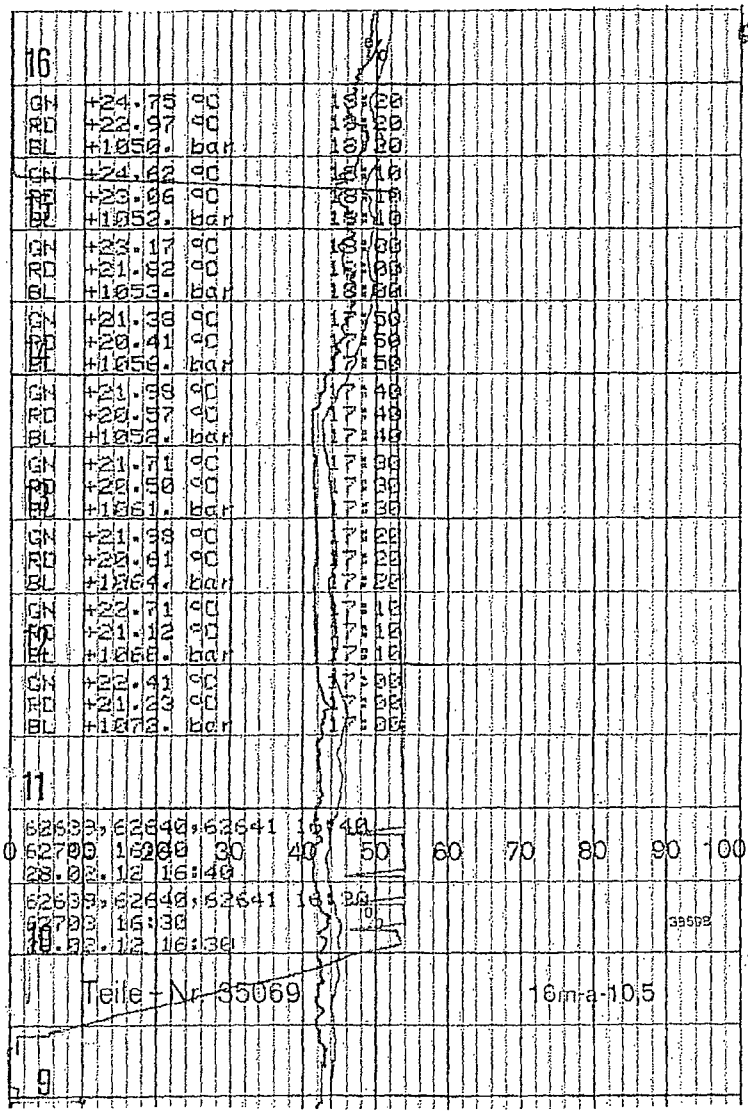
COUNTRY OF ORIGIN HUNGARY/EU

Date:	Inspector	Quality Control
29. February 2012.		ContiTech Rubber Industrial Kft. Quality Control Dept. (1)

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE

No: 310, 311, 312, 371

CentiTech Rubber Industrial Kft.
Quality Control Dept.
(I)



Delivery Address:

HELMERICH & PAYNE INT'L DRILLING

FOR RIG 227 - PANOLA COUNTY, TX

From the loop in Carthage TX take Highway 79 for 5.3 miles to FM 1970. Take left on FM 1970 and travel 3.6 miles to leas road on left.

PLEASE FIND DELIVERY NOTE AND CERTIFICATES INSIDE THIS PACKET

Your Ref No:	RIG 227
Our Ref No:	Pbc13134
Box No:	1 OF 1
Dimensions:	129" x25" x 126"
Weight:	2429 LBS

Continental CONTITECH

ContiTech Beattie Corp.
11535 Brittmoore Park Drive
Houston, TX 77041
USA

Tel: +1 (832) 327-0141
Fax: +1 (832) 327-0148
Email: mail@contitechbeattie.com
Web: www.contitechbeattie.com

Form No 100/12

ContiTech Beattie Corp
11535 Brittmoore Park Drive
Houston, TX 77041
Tel: (832) 327-0141
Fax: (832) 327-0148
E-mail mail@fluic.contitech.us
www.contitechbeattie.com

Delivery Note

Customer Order Number	RIG 227 - DERRICK JOHNSO	Delivery Note Number	006772	Page	1

Customer / Invoice Address
HELMERICH & PAYNE INT'L DRILLING CO
1437 SOUTH BOULDER
TULSA, OK 74119

Delivery / Address
HELMERICH & PAYNE INT'L DRILLING CO
RIG 227 - PANOLA COUNTY, TX
PLEASE CALL: 210-861-2217

Customer Acc No	ContiTech Beattie Contract Manager	ContiTech Beattie Reference	Date
H01	JM	013134	04/30/2012

Item No	Beattie Part Number / Description	Qty Ordered	Qty Sent	Qty To Follow
1	HP10CK3A-35-4F1 3" 10K 16C C&K HOSE x 35ft OAL CW 4.1/16" API SPEC FLANGE E/ End 1: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange End 2: 4.1/16" 10Kpsi API Spec 6A Type 6BX Flange c/w BX155 Standard ring groove at each end Suitable for H2S Service Working pressure: 10,000psi Test pressure: 15,000psi Standard: API 16C Full specification External fire cover: Not Included External armor guard: Included Temperature rating: -20 Deg C to +100 Deg C	1	1	0
2	00CERT-HOSEDATA HP HOSE TECHNICAL DATA BOOK	1	1	0
3	00FREIGHT PREPAID AND ADDED TO FINAL INVOICE BUYER: DERRICK JOHNSON E-MAIL: derrick.johnson@hpidc.com TEL: 903.894.1500	1	1	0

Continued...

Continental CONTITECH

Certificate of Conformity

PA No	013134	Client	HELMERICH & PAYNE INT'L DRILLING	Client Ref	RIG 227 - DERRICK JOHNSO	Page	1

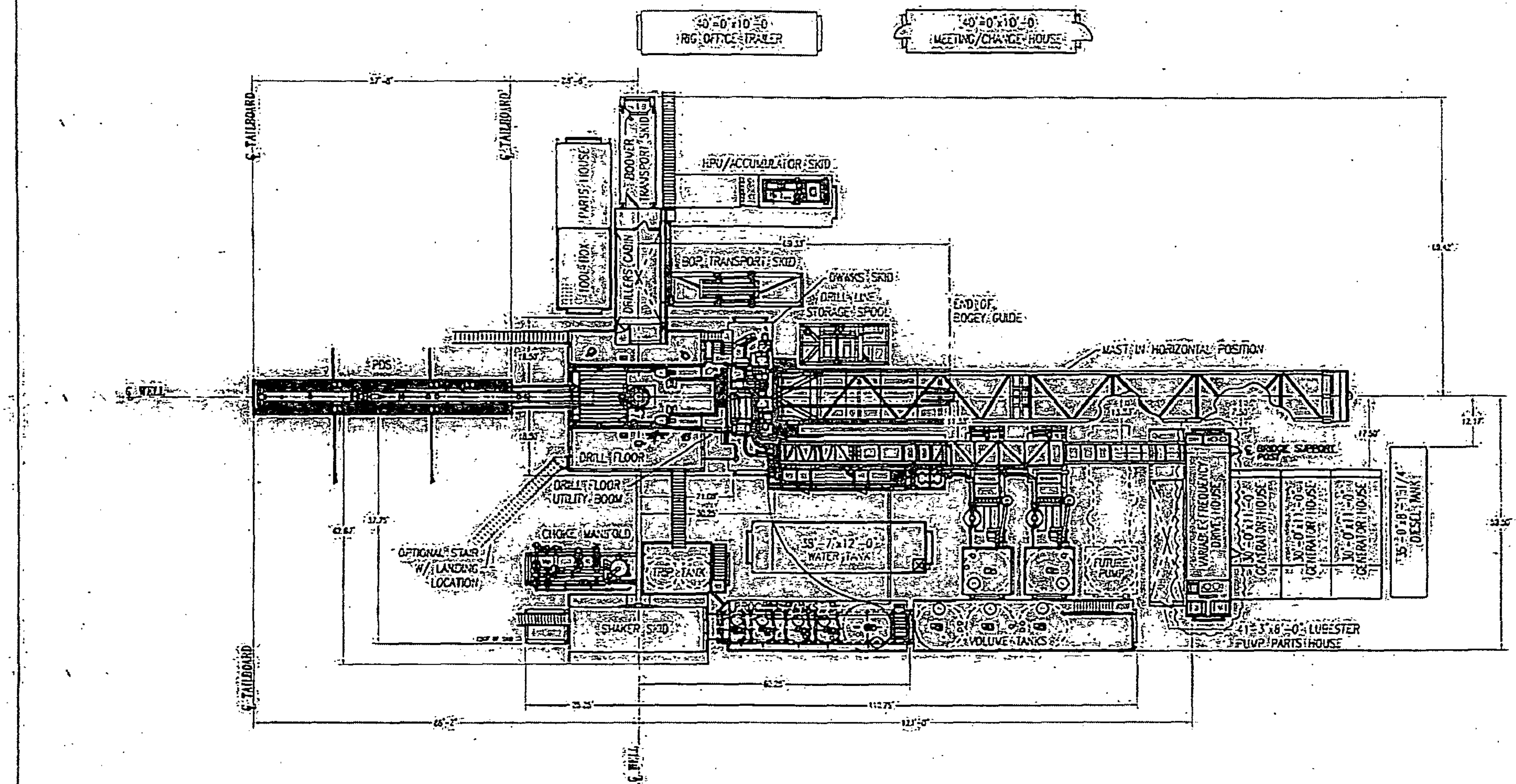
Part No	Description	Material Desc	Material Spec	Qty	WO No	Batch No	Test Cert No	Bin No	Drg No	Issue No
HP10CK3A-35-4F1	3" 10K 16C C&K HOSE x 35ft OAL			1	5878	T231/62639				

We hereby certify that these goods have been inspected by our Quality Management System, and to the best of our knowledge are found to conform to relevant industry standards within the requirements of the purchase order as issued to ContiTech Beattie Corporation.

Continental CONTITECH

Hose Data Sheet

CRI Order No.	529641
Customer	ContiTech Beattie Co.
Customer Order No	PO5878 STOCK
Item No	2
Hose Type	Flexible Hose
Standard	**API SPEC 16 C**
Inside dia in inches	3
Length	35 ft
Type of coupling one end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSIBX155 RING GROOVE
Type of coupling other end	FLANGE 4 1/16" API SPEC 6A TYPE 6BX FOR 10000 PSI BX155 RING GROOVE
H2S service NACE MR0175	Yes
Working Pressure	10 000 psi
Design Pressure	10 000 psi
Test Pressure	15 000 psi
Safety Factor	2,25
Marking	USUAL PHOENIX
Cover	NOT FIRE RESISTANT
Outside protection	St.steel outer wrap
Internal stripwound tube	No
Lining	OIL RESISTANT
Safety clamp	No
Lifting collar	No
Element C	No
Safety chain	No
Safety wire rope	No
Max.design temperature [°C]	100
Min.design temperature [°C]	-20
MBR operating [m]	1,60
MBR storage [m]	1,40
Type of packing	WOODEN CRATE ISPM-15



PLAN VIEW

ISSUED FOR FABRICATION
December-06-2011
DRAFTSMAN
ENGINEER

SEE SHT. 1 FOR COMPONENT LAYOUT WITH CATWALK

HELMERICH & PAYNE INTERNATIONAL DRILLING CO.

REV	DATE	DESCRIPTION	BY
7	12-6-11	UPDATED VFD HOUSE	[illegible]
6	8-22-11	[illegible]	[illegible]

TITLE: FLEX 3 RIG COMPONENT LAYOUT W/PDS

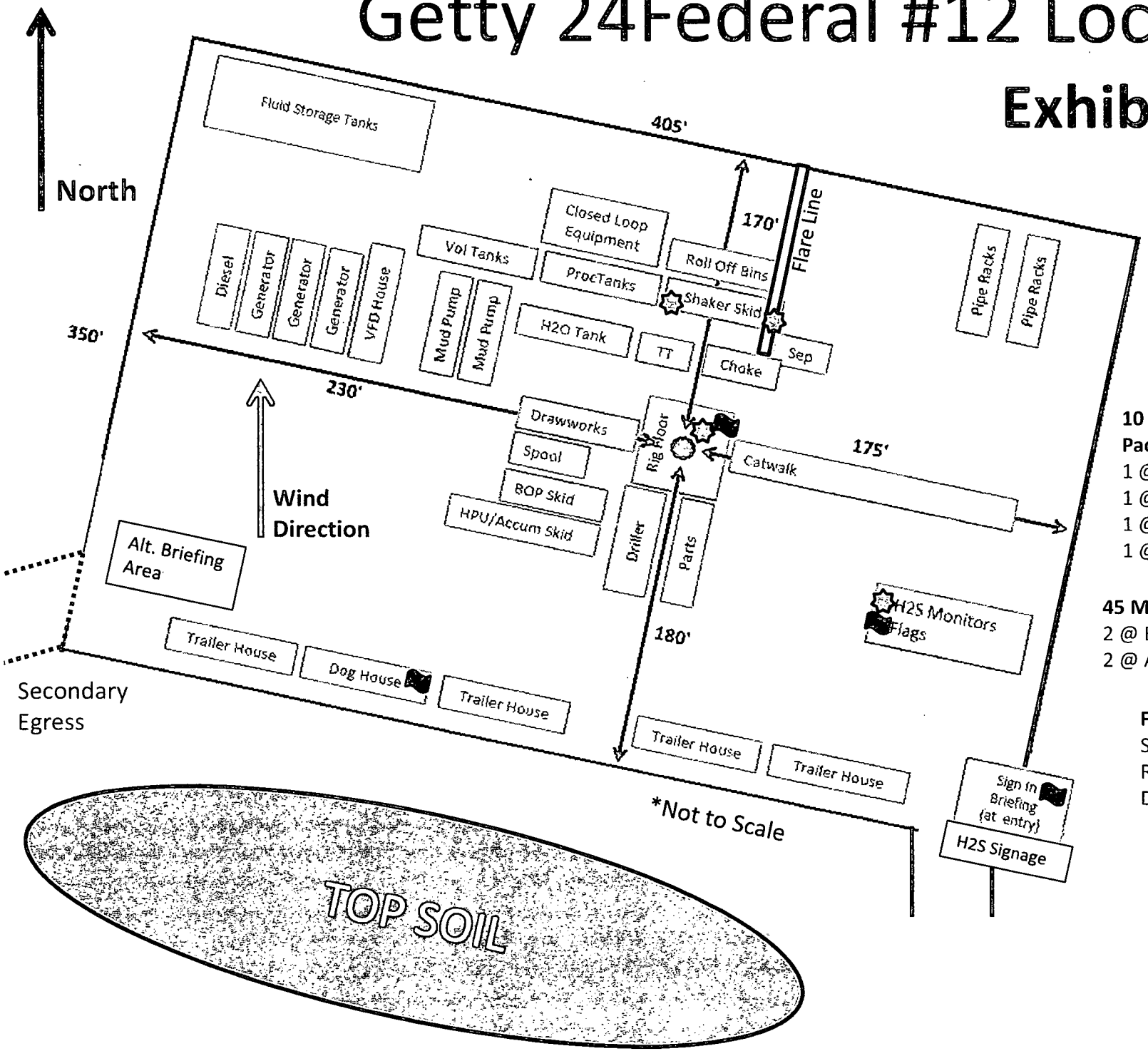
CUSTOMER: H&P

PROJECT: FlexRig3

DWG. NO.: 210-C0-01 REV: 8

Getty 24Federal #12 Location

Exhibit D



H2S Monitors:
BOP/Cellar
Rig Floor
Bell Nipple
Shaker Skid

10 Minute Escape Packs:
1 @ Pits
1 @ Trip Tank
1 @ Accumulator
1 @ Rig Floor

45 Minute SCBA:
2 @ Briefing Area
2 @ Alt Briefing Area

Flags:
Sign-in Shack
Rig Floor
Dog House

H2S CONTINGENCY PLAN
DRILLING and COMPLETIONS OPERATIONS

Neff 13 Federal #19
Neff 13 Federal #18
Getty 24 Federal #12

Livingston Ridge, Eddy County NM

CONTINGENCY PLAN

INDEX

SCOPE & OBJECTIVE

SCOPE

This contingency plan establishes guidelines for the public; all company employees, and contract employees whose work activities may involve exposure to Hydrogen Sulfide gas (H2S).

OBJECTIVE

1. Prevent any and all accidents, and prevent the uncontrolled release of Hydrogen Sulfide into the atmosphere.
2. Provide proper evacuation procedures.
3. Provide immediate and adequate medical attention should an injury occur.

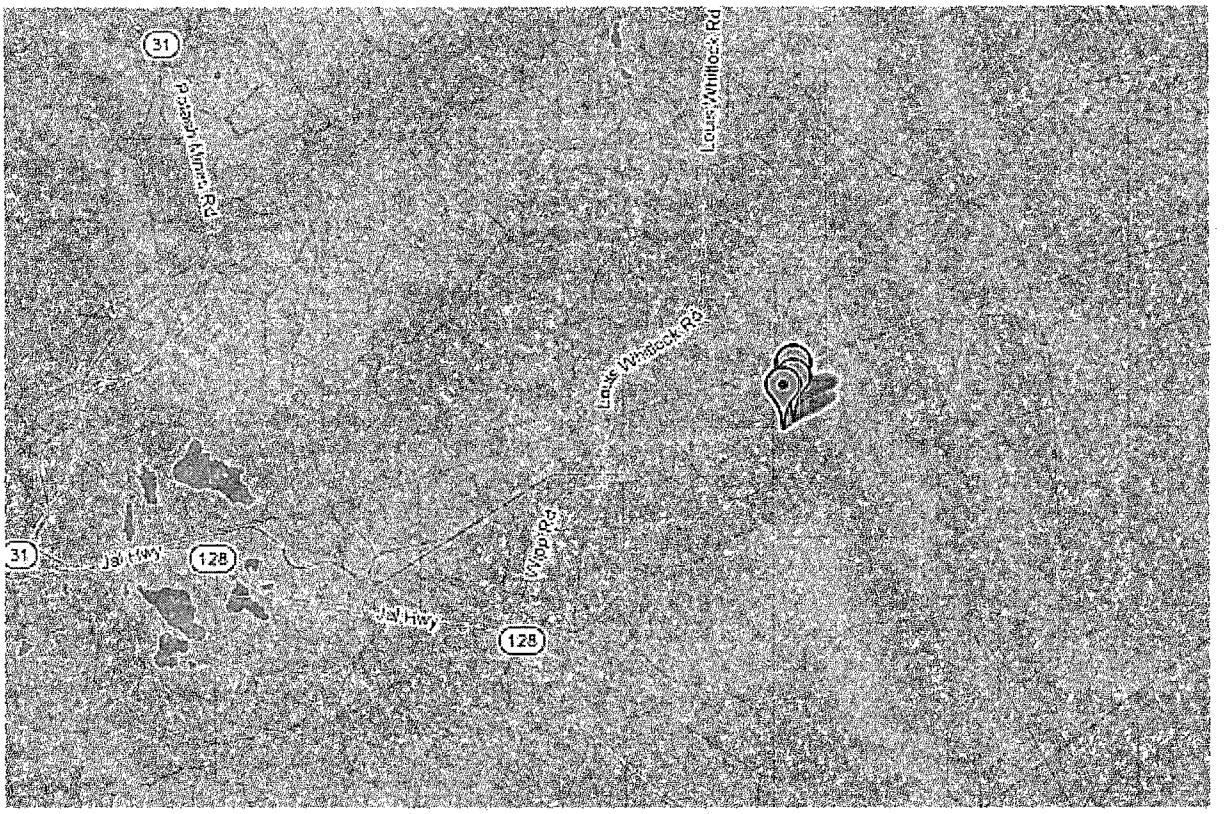
DIRECTIONS TO LOCATION

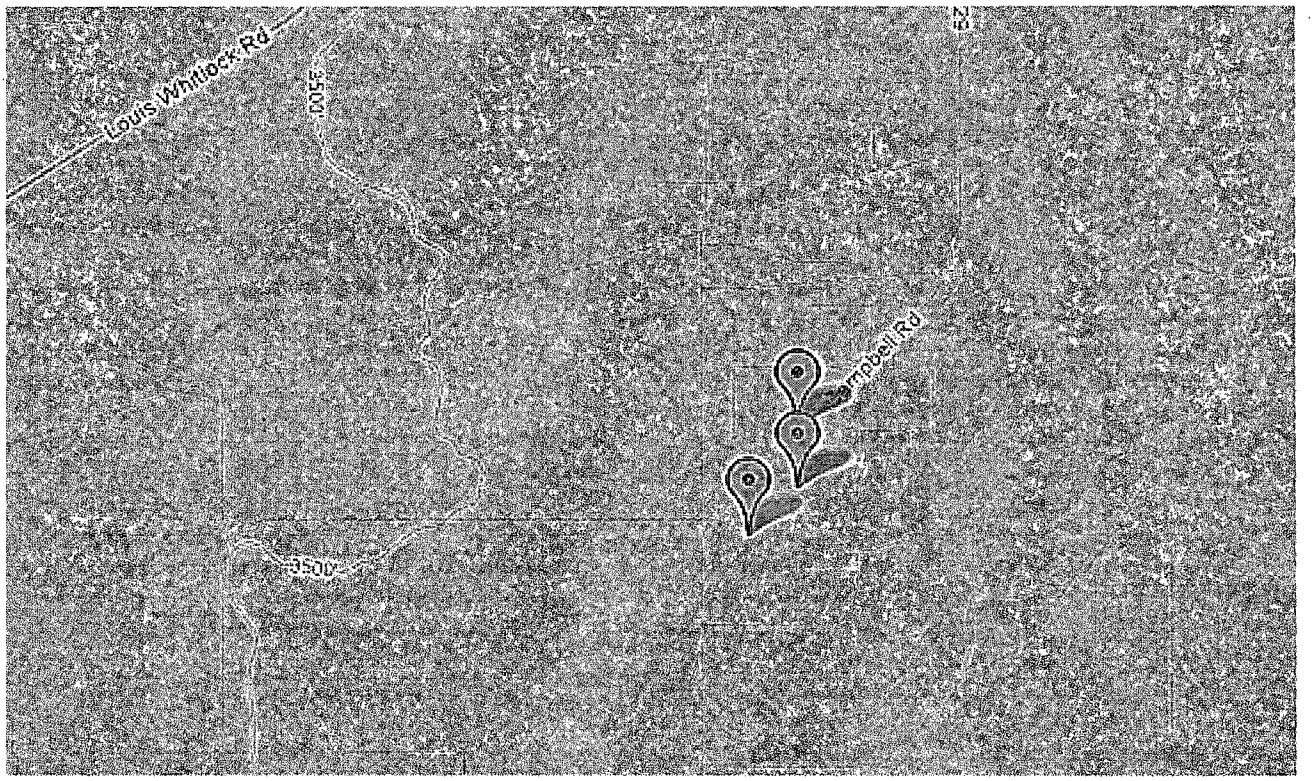
Neff 13 Federal #19:
From the intersection of US Highway 62-180 and CO Rd C-29 (Campbell Rd), go south-SW on Lea CO Road C-29 (Campbell Rd) for approximately 12.6 miles. Follow the rig signs.

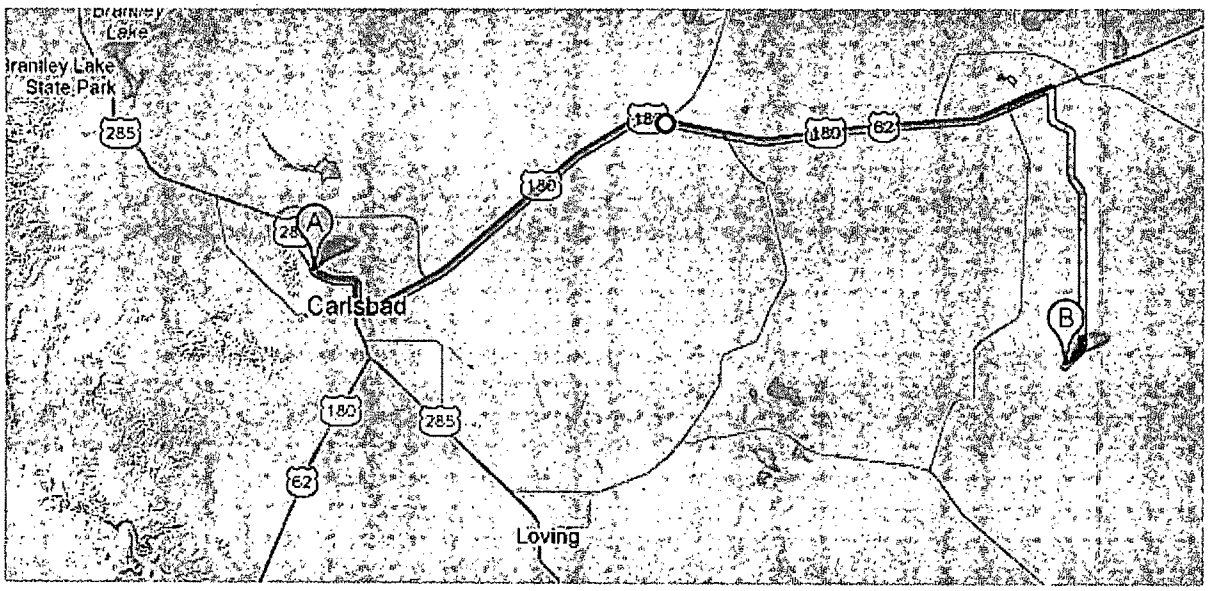
Neff 13 Federal #18:
From the intersection of US Highway 62-180 and CO Rd C-29 (Campbell Rd), go south-SW on Lea CO Road C-29 (Campbell Rd) for approximately 12.9 miles to a staked road on the left. Follow staked road southeast approximately 356 feet to this location. Follow the rig signs.

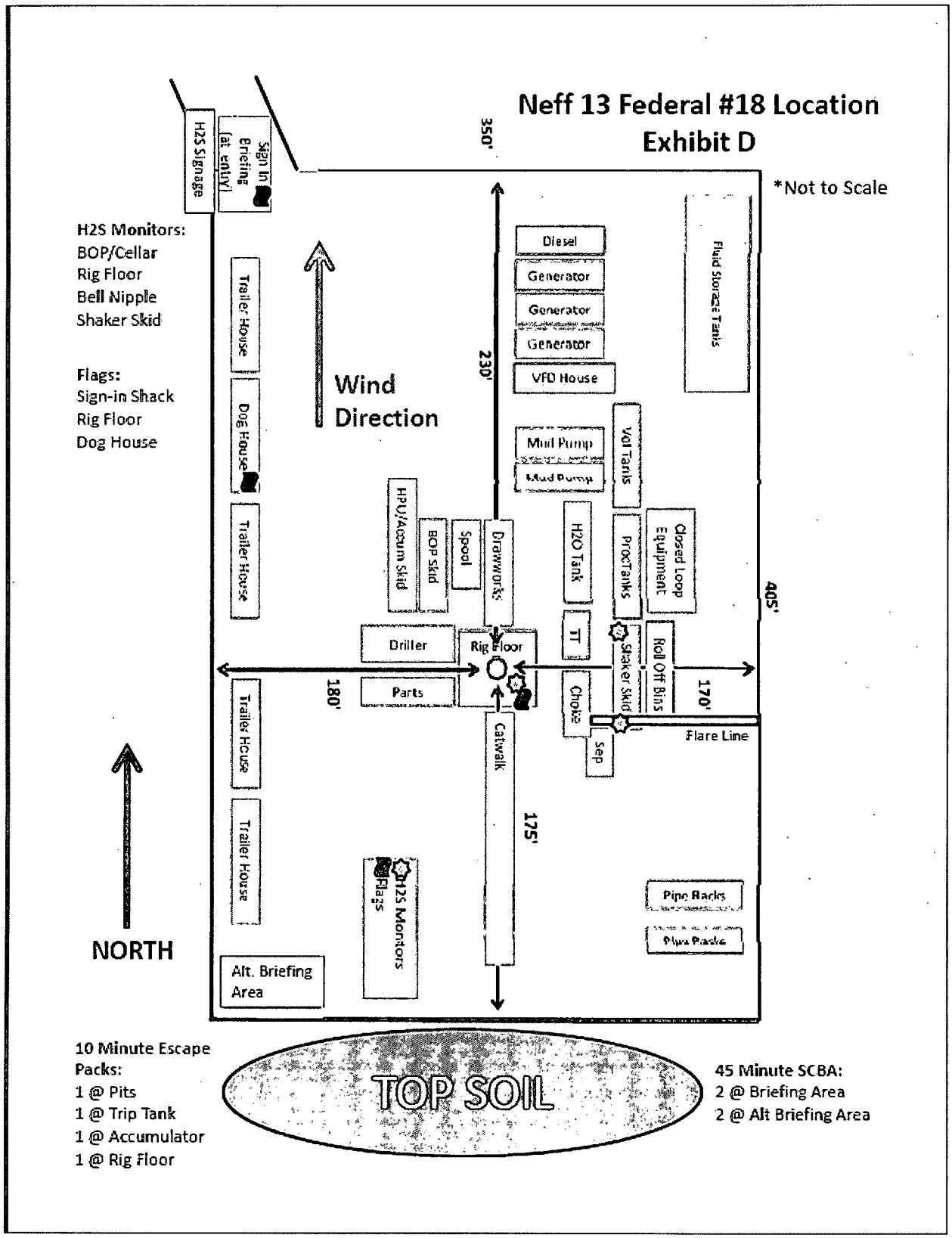
Getty 24 Federal #12:
From the intersection of US Highway 62-180 and CO Rd C-29 (Campbell Rd), go south on Lea CO Road C-29 (Campbell Rd) for approximately 11.5 miles. Continue on Campbell veering right approximately 1.5 miles, veering back left and heading south. At the cattle guard, the road changes to Co. Rd 798 (Red Road). Continue south on Red Road approximately 0.4 miles. Turn left and go East approximately 0.2 miles. Turn left and go north approximately 0.1 miles to a proposed road survey. Follow road survey stakes north approximately 1198 feet to this location.

MAP (All well locations)



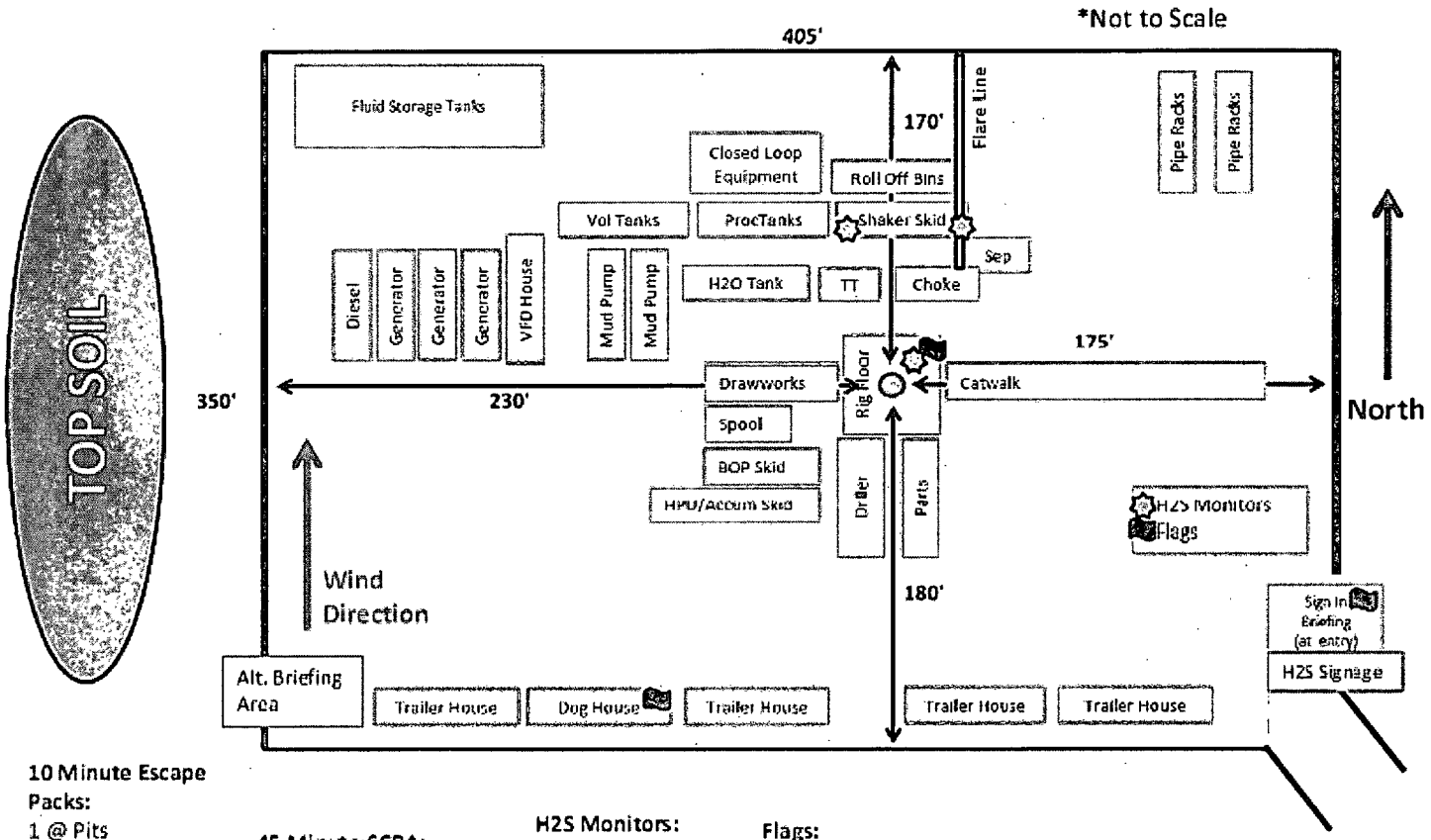



Brantley Lake
Brantley Lake State Park
285
180
62
A
Carlsbad
B
Loving


Neff 13 Federal #18 Location
Exhibit D
*Not to Scale
H2S Monitors:
BOP/Cellar
Rig Floor
Bell Nipple
Shaker Skid
Flags:
Sign-in Shack
Rig Floor
Dog House
H2S Signage
Sign in Briefing (at entry)
Trailer House
Dog House
Trailer House
Trailer House
Trailer House
Wind Direction
350'
230'
405'
180'
170'
175'
Diesel
Generator
Generator
Generator
VFD House
Fluid Storage Tanks
Mud Pump
Mud Pump
Vol Tanks
HPU/Accum Skid
BOP Skid
Spool
Drawworks
H2O Tank
ProcTanks
Closed Loop Equipment
Driller
Rig Floor
TT
Shaker Skid
Roll Off Bins
Parts
Choke
Flare Line
Sep
Catwalk
Flags
H2S Monitors
Pipe Racks
Pipe Racks
Alt. Briefing Area
NORTH
TOP SOIL
10 Minute Escape Packs:
1 @ Pits
1 @ Trip Tank
1 @ Accumulator
1 @ Rig Floor
45 Minute SCBA:
2 @ Briefing Area
2 @ Alt Briefing Area

Neff 13 Federal #19 Location

Exhibit D



10 Minute Escape Packs:
1 @ Pits
1 @ Trip Tank
1 @ Accumulator
1 @ Rig Floor

45 Minute SCBA:
2 @ Briefing Area
2 @ Alt Briefing Area

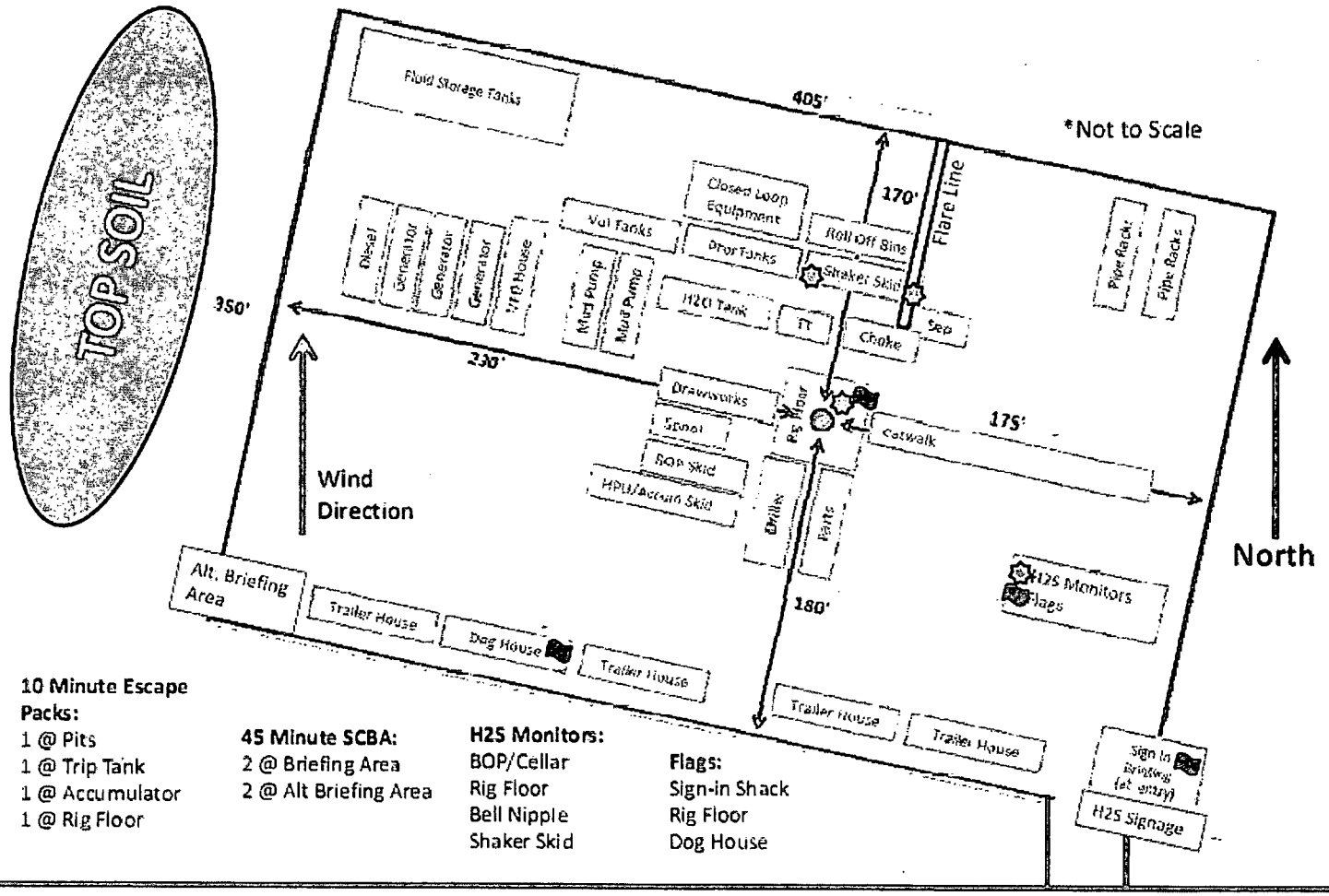
H2S Monitors:
BOP/Cellar
Rig Floor
Bell Nipple
Shaker Skid

Flags:
Sign-in Shack
Rig Floor
Dog House

Date printed: March 4, 2013

Getty 24Federal #12 Location

Exhibit D



10 Minute Escape Packs:
1 @ Pits
1 @ Trip Tank
1 @ Accumulator
1 @ Rig Floor

45 Minute SCBA:
2 @ Briefing Area
2 @ Alt Briefing Area

H2S Monitors:
BOP/Cellar
Rig Floor
Bell Nipple
Shaker Skid

Flags:
Sign-in Shack
Rig Floor
Dog House

EMERGENCY PROCEDURES AND RESPONSIBILITIES

It is the Chevron policy in all operations to do everything possible to insure the safety of its employees and the contractor's employees on the job site; additionally, to provide for the safety and comfort of persons near the operations by protecting the environment to the fullest degree possible.

The primary purpose of the procedures outlined herein is to guide the personnel on location in the event that Hydrogen Sulfide (H2S) reaches the surface.

TO PROTECT THEIR OWN SAFETY AND THE SAFETY OF OTHERS, ALL PERSONNEL ON THE JOB SITE WILL RIGIDLY ADHERE TO THIS PLAN.

Initial Suspected Problem Zone: Delaware Formation

Expected Concentration: ± 500 ppm

ROE @ 100 ppm = 88 feet
ROE @ 500 ppm = 40 feet

The plan should be implemented prior to spudding the well.

The cementing, casing and mud program are contained in the Chevron Drilling Well Design Program.

EMERGENCY NOTIFICATION / EVACUATION PLAN

EVACUATION PLAN

The following general plan has been developed in the event that any public evacuation becomes necessary.

1. Chevron has requested and has been assured the support of the various public safety entities in the area.
2. Any evacuation will be conducted by the Eddy County Sheriff's Department and supported by the State Police Department, Highway Patrol Division.
3. Assistance from other public safety entities may be requested if required.
4. The included maps detail the area of the well site including the inventory or the public within the radius of exposure of the well.
5. In the event that there is any suspected problem on the well, the well site supervisor will notify the Eddy County Sheriff's office 575-887-1888 for ALERT STATUS.
6. ALERT STATUS will require that available public support personnel will proceed to the Eddy County Sheriff's office in Carlsbad, NM and standby for instructions.
7. If isolation and evacuation are necessary, then units will be dispatched to points marked on the map with instructions to maintain road blocks.
8. Evacuation teams will then proceed to sectors to be evacuated. Evacuation procedure will follow appropriate consideration for wind conditions.
9. Personnel from on site will establish safe perimeters using H2S detectors.
10. The New Mexico Oil Conservation Division, BLM and other authorities will be notified as soon as possible.
11. Other supplemental contractors will be contacted and called in as needed.

EMERGENCY NOTIFICATION / EVACUATION PLAN

CHEVRON RESOURCES EMERGENCY COMMUNICATION LIST

In the event of communication failure, personnel contacted for well control incidents may be called in order as listed below until satisfactory communication is accomplished. Please give a reasonable amount of time for response before the next contact is called.

Drilling Operations

	Name	Title	Office Number	Home Number	Cell Phone	Pager
1.	Catherine Gouley	Drilling Engineer	(713) 372-7596		(281) 728-5502	
2.	Dan Jovanovic	Superintendent	(713) 372-1402		(832) 319-4079	
5.	Kim McHugh	Drilling Manager	(713) 372-7591		(713) 204- 8550	
6.	Darrell Hammonds	Operations Manager	(713) 372-5747		(281) 352 2302	
7.	Bianca Keneally	D&C HES	(713) 372-7586		(713) 417-9428	
8.	Ivan Pinney	Completion Engineer	(713) 372 1949		(713) 818 0381	

EMERGENCY NOTIFICATION / EVACUATION PLAN

EMERGENCY CALL LIST

Medical Support

Agency	Location	Telephone Number
AXIOM Medical	Houston	1-877-502-9466
Carlsbad Medical Center	Carlsbad, NM	575-887-4100
Lea Regional Medical	Hobbs	575-492-5290
New Mexico Poison Center	New Mexico	800-222-1222

EMERGENCY NOTIFICATION / EVACUATION PLAN

EMERGENCY CALL LIST

Public Support

Agency	Location	Telephone Number
Permian Regional Medical Center	Andrews	432-464-2159
Lea Regional Medical Center	Hobbs	575-492-5290
Carlsbad Medical Center	Carlsbad	575-887-4100
Ambulance	Hobbs	575-885-2111
Fire Department	Hobbs	575-885-3125

EMERGENCY NOTIFICATION / EVACUATION PLAN

EMERGENCY CALL LIST

Supplemental Equipment

MUD COMPANY

Baroid	575-396-1565	Lovington, NM

SAFETY COMPANY

Safety International	432-580-3770	Odessa
DXP Safety	800-530-8693	Odessa
DXP Safety	575-393-9188	Hobbs

CEMENTING COMPANY

Halliburton	806-891-6582	Hobbs
Schlumberger	575-393-6186	Hobbs

PUMP TRUCKS / WATER HAULERS

Key Energy	575- 885-2053	Carlsbad
Basic Energy	575-746-2217	Artesia

EMERGENCY NOTIFICATION / EVACUATION PLAN

EMERGENCY CONDITIONS
Operating Conditions

A. Emergency Procedures and Definition of Warning Flags.

1. Condition: YELLOW ---- NORMAL OPERATION
2. Condition: ORANAGE -- POTENTIAL DANGER--- CAUTION

a. Cause for condition:

- Circulating up drilling breaks
- Trip gas after trip
- Circulating out gas on choke
- Poisonous gas present, but below threshold concentrations

b. Safety actions:

- Check safety equipment and keep it with you
- Be alert for a change in conditions
- Follow instructions

3. Conditions RED---------- EXTREME DANGER

a. Cause for conditions

- Uncontrolled flow from the well with lethal concentrations of H2S

b. Safety Actions

- Masks On. All personnel will have protective breathing equipment with them. All personnel will stay in safe briefing area unless instructed to do otherwise.
- The decision to ignite the well is the responsibility of the company representative and should be made only as a last resort, when it is clear that:
  i Human life is endangered
  ii There is no hope of controlling the well under prevailing conditions.
- Order evacuation of local people within the danger zone.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

DRILLING CREW ACTIONS

1. All personnel will don their protective breathing apparatus. The drilling crew will take necessary precaution as indicated in OPERATING PROCEDURES.
2. The Buddy System will be implemented. All personnel will act upon direction from the Operator's Representative.
3. If there are nonessential personnel on location, they will move off location.
4. Entrance to the location will be patrolled, and the proper condition flag will be displayed at the entrance to the location.

IN THE EVENT OF AN ACCIDENTAL RELEASE OF POTENTIALLY HAZARDOUSS VOLUME OF H2S, THE FOLLOWING PROCEDURES WILL BE TAKEN.

1. All personnel on location will be accounted for and emergency search should begin for any missing.
2. All search missions will be conducted under fresh air masks in teams of two. Should the search team need to approach the well, safety harness and rope should be used.
3. All individual companies and agencies should be contacted according to the EMERGENCY CALL LIST.
4. An assigned crew member will blockade the entrance to the location. No unauthorized personnel will be allowed entry to the location.
5. The Operator's Representative will remain on location and attempt to regain control of the well.
6. The Company's designated representatives will begin evacuation of those persons in immediate danger.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

NOTE

When Hydrogen Sulfide might be encountered, NO personnel on location will be permitted to sleep in vehicles.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

RESPONSIBILITY

In the event of a release of potentially hazardous amounts of H2S, all personnel will immediately proceed upwind to the nearest designated safe area and don their protective breathing equipment. The Chevron representative will immediately, upon assessing the situation, set this plan into action by taking the proper procedures to contain the gas and notify the appropriate people and agencies.

If the Chevron representative is incapacitated or not on location, this responsibility will fall to the drilling toolpusher.

Chevron

1. In an emergency situation, the Drilling Representative on duty will have complete responsibility and will take whatever action is deemed necessary in an emergency situation to insure the personnel's safety, to protect the well and to prevent property damage.
2. Advise the Drilling Superintendent when procedures as specified herein have been met, will inform of emergencies and deviation from the plan, and see that procedures are observed at all times.
3. Advise each contractor, Service Company, and all others entering the site that Hydrogen Sulfide may be encountered and the potential hazards that may exist.
4. Authorize the evacuation of local residents if Hydrogen Sulfide threatens their safety.
5. Keep the number of persons on location to minimum during hazardous operations.
6. Assess the situation when alarm sounds, and issue work orders. When conditions warrant, order all personnel to "Safe Briefing Areas".
7. Direct corrective actions to control flow of gas.
8. Has full responsibility for the decision to ignite the well. The decision will be made only as a last resort.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

DRILLING COMPANY

1. The Toolpusher will assume all responsibilities of the Drilling Representative in an emergency situation in the event that the Drilling Representative becomes incapacitated.
2. The Toolpusher will order the Driller to secure the rig if time permits.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

EQUIPMENT TO BE PROVIDED BY SAFETY COMPANY

1. One safety trailer containing an 8 bottle air cascade system
2. 750 feet of air line hose
3. Four breathing air manifolds
4. Four 30 minute rescue units
5. Five work/escape units
6. One filler hose for the work/escape and rescue units
7. One location sign with flags
8. Two briefing area signs
9. Two windsocks
10. One electronic monitor with three sensor heads, warning light and siren.

EMERGENCY PROCEDURES AND RESPONSIBILITIES

TEMPORARY SERVICE PERSONNEL

All service personnel, such as cementing crews, logging crews, specialists, mechanics and welders will furnish their own safety equipment as required to comply with OSHA and Chevron.

VISITORS

Visitors and nonessential personnel will be prohibited from remaining in, or entering a contaminated area where Hydrogen Sulfide concentration in the atmosphere exceeds 10 ppm.

IGNITING WELL INSTRUCTIONS

THE DECISION TO IGNITE THE WELL IS THE RESPONSIBILITY OF THE CHEVRON REPRESENTATIVE. In the event he is incapacitated or unavailable, it becomes the responsibility of the drilling rig superintendent.

The decision to ignite the well should be made only as a last resort and in the situation where it is clear that:

1. Human life is in danger
2. There is no hope of controlling the well under current conditions.

The Chevron Drilling Superintendent should be notified as soon as possible. The first phase of evacuation should be initiated immediately.

Once the decision has been made the following procedures should be followed:

1. Four people, wearing self-contained breathing apparatus will be needed for the actual lighting of the well. They must first establish the flammable perimeter by using an explosion meter. This should be established at 30% to 40% of the lower flammable limits.
2. After the flammable perimeter has been established and everyone removed from the area, the ignition team should select a site upwind of the well, from which to ignite. The site should offer the maximum protection and have a clear path for retreat from the area.
3. The ignition team should have safety belts and lanyards attached and manned before attempting ignition. If the leak is not ignited on the first attempt, move in 20 to 30 feet and fire again. Continue to monitor with the explosion meter and never fire from an area with over 75% of the lower explosive limit (LEL). If having trouble igniting the well, try firing 40 degrees to 90 degrees on either side of the well.
4. After ignition or attempted ignition, the toxic perimeter must be established and evacuation continued until the well is contained.
5. All personnel will act only as directed by the person in charge of the operations.

TRAINING PROCEDURES AND MATERIALS

SAFETY TRAINING

1. Hydrogen Sulfide Safety Training will be provided to all personnel prior to rig up on location. The training sessions will cover, but will not be limited to the following.
   a. General information on H2S and SO2 gas
   b. Hazards of H2S and SO2 gas
   c. Safety equipment on location
   d. Proper use and care of personal protective equipment
   e. Operational procedures in dealing with H2S gas
   f. Evacuation procedures
   g. Chemicals to be used in mud to control H2S
   h. First aid, reviving and H2S victim, toxicity, etc.
   i. Designated **S**afe **B**riefing **A**reas (S.B.A.)
   j. Metallurgical considerations

   NOTE: Once H2S Safety Procedures are established on location, no beards or facial hair which will interfere with face seal or mask will be allowed on location
2. When H2S alarm is activated:
   a. Mask up
   b. Raise tool joints above the rotary table and shut down pump
   c. Close in hydril
   d. Go to Safe Briefing Area

TRAINING PROCEDURES AND MATERIALS

PHYSICAL EFFECTS OF HYDROGEN SULFIDE POISONING

The Principal Hazard Is Death by Inhalation

When the amount of gas absorbed into the bloodstream exceeds that which is readily oxidized, systemic poisoning results, with a general action on the nervous system. Labored respiration occurs shortly and respiratory paralysis may follow immediately at concentrations of 700 ppm and above. This condition may be reached almost without warning as the originally detected odor of H2S may have disappeared due to olfactory paralysis. Death then occurs from asphyxiation unless the exposed person is removed immediately to fresh air and breathing is stimulated by artificial respiration. Other levels of exposure may cause the following symptoms individually or in combination:

1. Headache
2. Dizziness
3. Excitement
4. Nausea or gastro-intestinal disturbances
5. Dryness and sensation of pain in nose, throat, and chest
6. Coughing
7. Drowsiness

All personnel should be alerted to the fact that detection of H2S solely by sense of smell is highly dangerous, as the sense of smell is rapidly paralyzed by the gas. 10 ppm of H2S detected should be treated as if it were 700 ppm.

TRAINING PROCEDURES AND MATERIALS

REMEMBER:

After the well is ignited, burning Hydrogen Sulfide (H2S) will convert to Sulfur Dioxide (SO2), which is also a highly toxic gas.

DO NOT ASSUME THE AREA IS SAFE AFTER THE WELL IS IGNITED.

TRAINING PROCEDURES AND MATERIALS

THE USE OF SELF CONTAINED BREATHING EQUIPMENT

1. Respirators shall be inspected frequently at random, to insure that they are properly used, cleaned and maintained.
2. Anyone who may use the respirators shall be trained in how to insure proper face piece to face seal. They shall wear respirators in normal air and then wear it in a test atmosphere. (Note: such items as facial hair – beard or sideburns – and eyeglass temple pieces will not allow a proper seal.) Anyone who may be reasonably expected to wear respirators should have these items removed before entering a toxic atmosphere. A special mask must be obtained for anyone who must wear eye glasses. Contact lenses should not be allowed.
3. Maintenance and care of respirators:
   a. A program for maintenance and care of respirators shall include the following:
      - Inspection for defects, including leaks checks
      - Cleaning and disinfecting
      - Repair
      - Storage
   b. Inspection: Self contained breathing apparatus for emergency use shall be inspected monthly for the following and a permanent record kept of these inspections.
      - Fully charged cylinders
      - Regulator and warning devise operations
      - Condition of face piece and connections
      - Elastic or rubber parts shall be stretched or massaged to keep them pliable and prevent deterioration.
   c. Routinely used respirators shall be collected, cleaned and disinfected as frequently as necessary to insure proper protection is provided.
4. A person assigned a task that requires use of self contained breathing equipment should be certified, physically fit for breathing equipment usage by the local physician at least annually.
5. Respirators should be worn:
   a. When breaking out any line where H2S can reasonably be expected.
   b. When sampling air in areas to determine if toxic concentrations of H2S exist.
   c. When working in areas where over 15 ppm H2S has been detected.
   d. At any time there is a doubt as to the H2S concentration in the zone to be entered.

TRAINING PROCEDURES AND MATERIALS

TRAINING

Every person working in any capacity on the lease will be required to review the emergency procedures and will participate in the training program.

CHEVRON will provide personnel to direct the training program and indoctrinate all authorized persons on the lease in the proper use of the safety equipment.

The training personnel will work individually with each member until they are satisfied that the crew member is familiar with the emergency procedures and the training program. This should be accomplished prior to an individual's work operation.

Training will include hands on use of all equipment in order to familiarize the trainees with the safety equipment.

TRAINING PROCEDURES AND MATERIALS

TREATMENT OF HYDROGEN SULFIDE POISONING

Inhalation

As Hydrogen Sulfide in the blood oxidizes rapidly, symptoms of acute poisoning pass off when inhalation of the gas ceases. It is important, therefore, to get the victim of poisoning to fresh air as quickly as possible. He should be kept at rest and chilling should be prevented. If respiration is slow, labored or impaired, artificial respiration may be necessary.

Most persons overcome by Hydrogen Sulfide may be revived if artificial respiration is applied before heart action ceases. Victims of poisoning should be under the care of a physician as soon as possible. Irritation due to sub acute poisoning may lead to serious complications such as pneumonia. Under those conditions, treatment by the physician necessarily would be symptomatic. The patient should be kept in fresh air.

Contact with Eyes

Eye contact with liquid and / or gas containing Hydrogen Sulfide will cause painful irritation (conjunctivitis). Keep patient in a darkened room, apply ice compresses to eyes, put ice on forehead, and send for a physician. The irritation caused by exposure to Hydrogen Sulfide requires treatment by a physician, preferably an eye specialist. The prognosis for recovery in these cases is usually good.

Contact with Skin

Skin absorption is very low. Skin discoloration is possible after contact with liquids containing Hydrogen Sulfide. If such skin contact is suspected, the area should be thoroughly washed.

EFFECTS OF HYDROGEN SULFIDE ON METAL

Hydrogen Sulfide dissolves in water to form a weak acid that can cause some pitting, particularly in the presence of oxygen and/or carbon dioxide. However, the most significant action of H2S is its contribution to a form of Hydrogen embrittlement known as Sulfide Stress Cracking. Sulfide Stress Cracking is a result of metals being subjected to high stress levels in a corrosive environment where H2S is present. The metal will often fail in a brittle manner. Sulfide Stress Cracking of steel is dependent upon and determined by:

1. Strength (hardness) of the steel – the higher the strength, the greater the susceptibility to sulfide stress cracking. Steels having yield strengths up to 95,000 psi and hardness up to Rc22 are generally resistant to sulfide stress cracking. These limitations can be extended slightly higher for properly quenched and tempered materials.
2. Total member stress (load) – higher the stress level (load) the greater the susceptibility to sulfide stress cracking.
3. Corrosive environment – corrosive reactions, acids, bacterial action, thermal degradation of low Ph fluid environment.

TRAINING PROCEDURES AND MATERIALS

DRILLSITE LOCATION

1. The drilling rig should be situated on location such that the prevailing winds blow across the rig toward the reserve pit or at right angles to a line from the rig to the reserve pit.
2. The entrance to the location should be designed so that it can be barricaded if Hydrogen Sulfide emergency conditions arise. An auxiliary exit (or entrance) should be available in case of a catastrophe; a shift in the wind direction would not preclude escape from the location. Appropriate warning signs and flags should be placed at all location entrances.
3. Once H2S safety procedures are established on location, no beards or facial hair which will interfere with face seal or mask will be allowed on location.
4. A minimum of two Briefing Areas will be established, not less than 250 feet from the wellhead and in such location that at least one area will be up-wind from the well at all times. Upon recognition of an emergency situation, all personnel should assemble at the designated briefing areas for instructions.
5. A safety equipment trailer will be stationed at one of the briefing areas.
6. Windsocks will be installed and wind streamers (6 to 8 feet above ground level) placed at the location entrance. Windsocks shall be illuminated for night time operations. Personnel should develop wind direction consciousness.
7. The mud logging trailer will be located so as to minimize the danger from gas that breaks out of the drilling fluid.
8. Shale shaker mud tanks will be located so as to minimize the danger from gas that breaks out of the drilling fluid.
9. Electric power plants will be located as far from the well bore as practical so that it may be used under condition where it otherwise would have to be shut down.
10. When approaching depth where Hydrogen Sulfide may be encountered, appropriate warning signs will be posted on all access roads to the location and at the floor of all stairways to the derrick floor.
11. Appropriate smoking areas will be designated and smoking will be prohibited elsewhere.

WELL LOCATION LAYOUT AND EQUIPMENT

SPECIAL EQUIPMENT

1. Flare lines should be as long as practical (**150' minimum** per BLM requirement), securely staked in accordance with the Safe Work Practices Manual.
2. An electronic Hydrogen Sulfide monitor will be installed with a combination visual and audible alarm system located where it can be seen and/or heard throughout the drilling area.
3. The electronic Hydrogen Sulfide monitoring system will be calibrated to activate the low alarm (visual alarm) at a concentration of 10 ppm Hydrogen Sulfide in the atmosphere and the high alarm at a concentration of 15 ppm Hydrogen Sulfide in the atmosphere.
4. Extra equipment will be available if required to provide adequate respiratory protection for all personnel on location.

WELL LOCATION LAYOUT AND EQUIPMENT

BLOWOUT PREVENTION EQUIPMENT

1. A kill line of ample strength and length will be laid to safe point to allow pumping into the well in an emergency situation.
2. The closing unit should be located a safe distance from the well bore and positioned for maximum utilization based on the prevailing wind direction.
3. BOP equipment will be tested in accordance with standard company practice. (Safe Work Practices Book Section 13.9)

WELL LOCATION LAYOUT AND EQUIPMENT

DRILL STEM TEST

1. A drill stem tests of Hydrogen Sulfide zones will be approved by the BLM.
2. Drill stem testing of Hydrogen Sulfide zones will be permitted only during daylight hours.
3. All nonessential personnel will be moved to "Safe Briefing Areas".
4. Put on air masks before formation fluids are expected at the surface and continue "Masks On" until flare is ignited and work areas test no more than 10 ppm Hydrogen Sulfide and the area has been declared safe.

BLM ADDENDUM

HYDROGEN SULFIDE TRAINING

1. Hydrogen Sulfide Safety Training will be provided to all personnel prior to rig up on location. The training sessions will cover, but will not be limited to the following.
   a. General information on H2S and SO2 gas
   b. Hazards of H2S and SO2 gas
   c. Safety equipment on location
   d. Proper use and care of personal protective equipment
   e. Operational procedures in dealing with H2S gas
   f. Evacuation procedures
   g. Chemicals to be used in mud to control H2S
   h. First aid, reviving and H2S victim, toxicity, etc.
   i. Designated **S**afe **B**riefing **A**reas (S.B.A.)
   j. Metallurgical considerations

   NOTE: Once H2S Safety Procedures are established on location, no beards or facial hair which will interfere with face seal or mask will be allowed on location

2. When H2S alarm is activated:
   a. Mask up
   b. Raise tool joints above the rotary table and shut down pump
   c. Close in hydrill
   d. Go to Safe Briefing Area

3. H2S and Well Control Drill shall be held weekly for all personnel in each crew.

HYDROGEN SULFIDE EQUIPMENT AND SYSTEMS

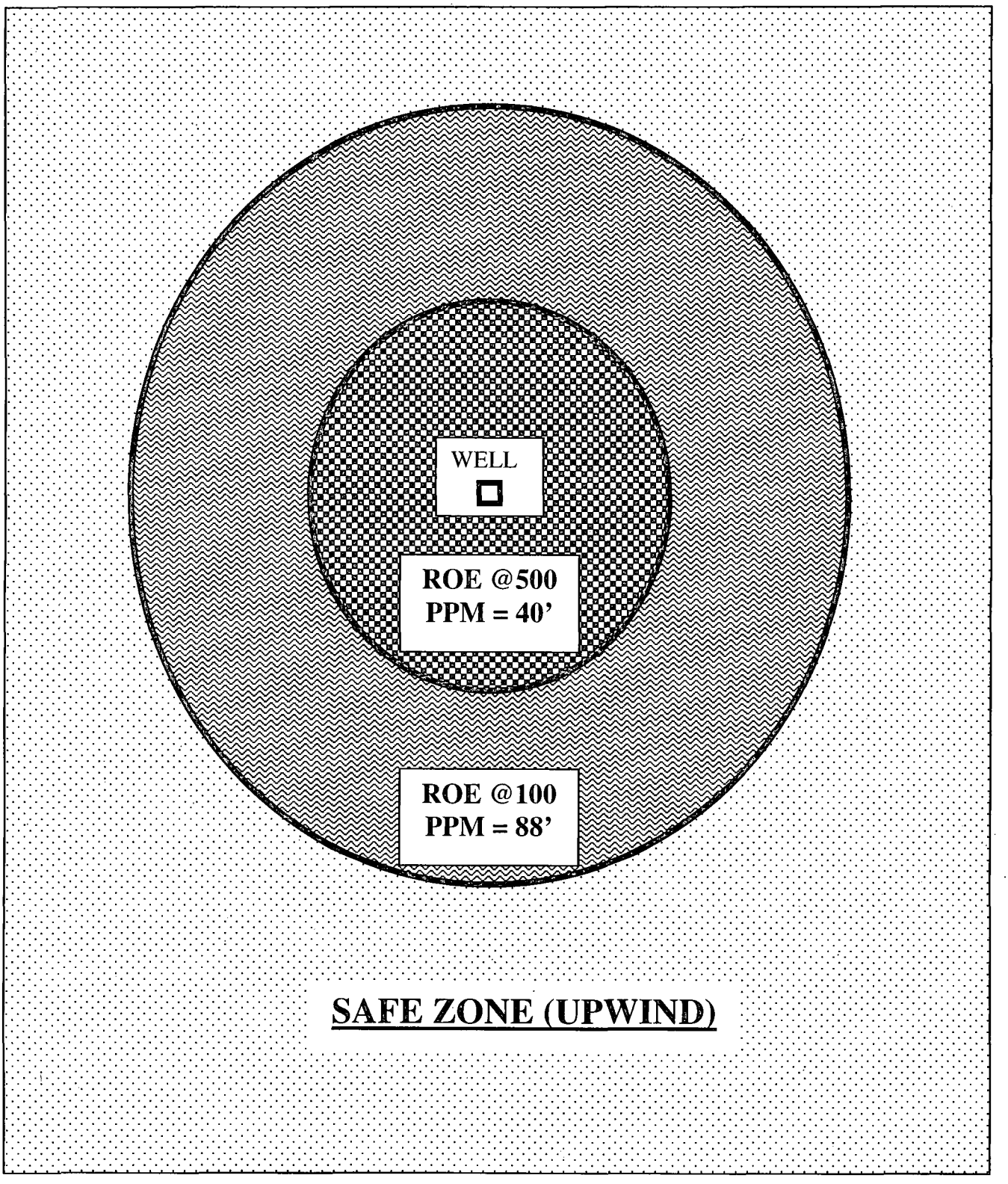
1. Well Control Equipment :
   a. Flare Line
   b. Choke Manifold
   c. Blind rams and Pipe rams
   d. Auxiliary equipment : annular preventer, mud-gas separator, rotating head
2. Protective Equipment for essential personnel
   a. 5 EBA 10 minute escape packs (part number 975090)

b. 4 Sperian Panther 45 minute SCBA work packs (part number 888888) with Type C supplied air respirator

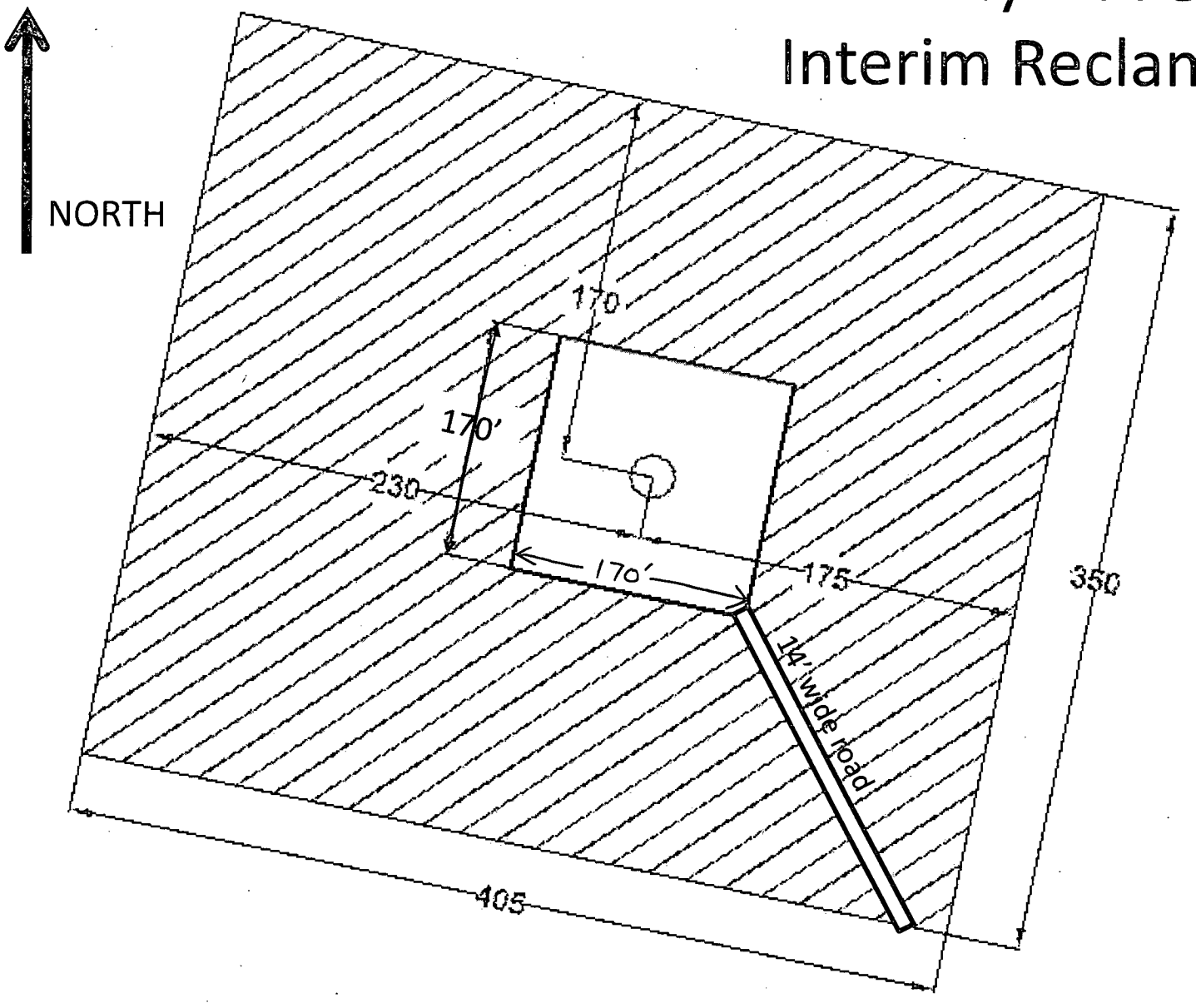
3. H2S detection and monitoring equipment and visual warning signs:
   a. 1 location sign with H2S flags
   b. 2 briefing area signs
   c. 2 windsocks
   d. 1 electronic H2S monitor with three sensor heads, warning lights and siren.
4. Mud Program
   a. The mud program has been designed to minimize the volume of H2S circulated to the surface.
5. Metallurgy
   a. All drill strings, casings, tubing, wellhead, blowout preventers, drilling spool, kill lines, choke manifold and lines and valves shall be suitable for H2S service.
6. Communication
   a. Company vehicles equipped with cellular telephone.

Emergency Contact List

	Name	Title	Office Number	Cell Phone
1.	Catherine Gourley	Drilling Engineer	(713) 372-7596	(281) 728-5502
2.	Dan Jovanovic	Superintendent	(713) 372-1402	(832) 319-4079
5.	Kim McHugh	Drilling Manager	(713) 372-7591	(713) 204- 8550
6.	Darrell Hammonds	Operations Manager	(713) 372-5747	(281) 352 2302
7.	Bianca Keneally	D&C HES	(713) 372-7586	(713) 417-9428
8.	Ivan Pinney	Completion Engineer	(713) 372 1949	(713) 818 0381


WELL
ROE @500
PPM = 40'
ROE @100
PPM = 88'
SAFE ZONE (UPWIND)

Getty 24 Federal 12
Interim Reclamation Map



SURFACE USE AND OPERATIONS PLAN FOR
CHEVRON U.S.A. INC.

Getty "24" Federal #12

330' FNL and 590' FWL
Section 13, Township 22 South, Range 31 East
Eddy County, New Mexico

LOCATED: 29 Miles East of Carlsbad, New Mexico

FEDERAL LEASE NUMBER: NM-25876

LEASE ISSUED: Lease is in producing status

ACRES IN LEASE: 640 acres

RECORD LESSEE: Chevron U.S.A. Inc.

SURFACE OWNERSHIP: U.S.A.

GRAZING PERMITTEE: Slash 46, Inc.
P.O. Box 1358
Loving, NM 88256

POOL: Livingston Ridge Delaware

POOL RULES: Field rules are for no wells to be located closer than 330' to any 1/4 1/4 section line, to be 330' from the lease line, and 330' from the nearest well.

EXHIBITS:

A. Access Road Topo Map (Location Verification Map)
B. Map of Existing Wells within 1-mile radius
C. Pipeline Survey
D. Drilling Rig Pad Layout

1. EXISTING ACCESS ROADS

A. Exhibit "A" is a portion of a 7.5 minute U.S.G.S. topographic map at a scale of 1"=2000' showing the proposed well site and the existing roads in the area. Point "A" is the junction of the proposed resource road with an existing resource road. To reach Point "A", begin at the intersection of U.S. 62-180 and Co Rd C-29 (Campbell Rd). Go South on C-29 approximately 11.5 miles. Continue on Campbell, veering right approximately 1.5 miles, veering back left and heading south. At the cattle guard, the road changes to Co. Rd 798 (Red Road). Continue south on Red Road approximately 0.4 miles. Turn left and go East approximately 0.2 miles. Turn left and go North approximately 0.1 miles to a proposed road survey. Follow road survey stakes north approximately 1198 feet to this location

2. PLANNED RESOURCE ROAD

A. **Length and Width**: From Point "A" as shown on Exhibit "A", a new 14 foot wide resource road will be constructed 1198 feet Northerly (Shown on Exhibit "A") with access at the Southeast corner of the proposed well pad, as shown on Exhibits "A" and "D".

B. **Surfacing Material**: Caliche material will be used to surface the proposed road. It will be watered, compacted and graded.

C. **Maximum Grade**: An approximate grade of less than one percent will be encountered to the proposed well pad.

D. **Turnouts**: None will be required

E. **Drainage Design**: The new road will be crowned at the center to direct drainage to ditches on both sides of the roadway.

F. **Culverts**: None will be required.

G. **Cuts and Fills**: A slight amount of leveling will be required to the proposed well pad

H. **Gates and Cattle Guards**: None will be required.

3. LOCATION OF EXISTING WELLS

A. Existing wells on the lease and within 1-mile radius are shown in Exhibit "B"

4. LOCATION OF EXISTING AND PROPOSED FACILITIES

A. The oil, gas and/or water that this well will produce will be transported by a 2 or 2-1/2" steel surface flowline (shown in pipeline survey in Exhibit "C") laying along the side of the proposed and existing resource roads to the existing Getty Federal "24" Battery located on the East side of the existing well pad as shown on Exhibit "C".

B. No electric power line will be built to service this well at this time.

5. LOCATION AND TYPE OF WATER SUPPLY

A. Water necessary for drilling operations will be purchased and trucked to the well site or will be transported to the well site by a temporary pipeline laid on the ground alongside existing and proposed roads.

6. SOURCE OF CONSTRUCTION MATERIALS

A. Caliche needed for the road and well pad will be taken from an existing pit in the SW/4, NW/4 of Section 1, T23S, R31E, Eddy County, New Mexico. It will be transported to the proposed road and well site by Eddy County Road 798 and the existing resource roads.

7. METHOD OF HANDLING WASTE DISPOSAL

A. Drill cuttings and fluids will be hauled to a disposal facility

B. Water produced during tests will be disposed of at commercial or company facilities.

C. Oil produced during tests will be stored in test tanks until sold.

D. Trash, waste paper, garbage and junk will be stored in a trash bin located on the drill site pad. It will be transported to an approved landfill for disposal within 30 days after completion of operations. All waste material will be contained to prevent scattering by the wind. Location of trash bin will be on the NE corner of the drill pad.

8. ANCILLARY FACILITIES

A. None required

9. WELL SITE LAYOUT

A. Exhibit "D" shows the relative location and dimensions of the well pad. This will be a closed loop system.

B. Cut and Fill requirements will be minor, but clearing and leveling of the well site will be necessary.

10. PLANS FOR RECLAMATION OF THE SURFACE

A. After completion of the drilling and/or completion of operations, all equipment and other material not necessary for operators will be removed. Pits will be filled and the location will be cleaned of all trash and junk to leave the well site in an as aesthetically pleasing condition as possible.

B. Any unguarded pits containing fluids will be fenced until the pits are dry.

C. After abandonment, all equipment, trash and junk will be removed and the well site will be cleaned. Any special reclamation and/or special re-vegetation requirements of the Surface Management Agency will be complied with and will be accomplished as rapidly as possible.

11. OTHER INFORMATION

A. Topography: The land surface in the area of the well is relatively level with small and moderate sand dunes. Regionally, the land slopes to the Northeast with average slopes of two to four percent.

B. Soil: Top soil at the well site is a deep sandy loam.

A. None required

9. WELL SITE LAYOUT

A. Exhibit "D" shows the relative location and dimensions of the well pad. This will be a closed loop system.

B. Cut and Fill requirements will be minor, but clearing and leveling of the well site will be necessary.

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C. After abandonment, all equipment, trash and junk will be removed and the well site will be cleaned. Any special reclamation and/or special re-vegetation requirements of the Surface Management Agency will be complied with and will be accomplished as rapidly as possible.

11. OTHER INFORMATION

A. Topography: The land surface in the area of the well is relatively level with small and moderate sand dunes. Regionally, the land slopes to the Southwest with average slopes of less that one or two percent.

B. Soil: Top soil at the well site is a deep sandy loam.

C. Flora and Fauna: The vegetation cover is moderate and includes range grasses, weeds, scrub oak bushes and mesquite bush. Wildlife in the area is that typical of a semi-arid desert land and includes coyotes, rabbits, rodents, reptiles, hawks, dove, quail and other small birds.

D. Ponds and Streams: There are no rivers, lakes, ponds or streams in the area.

E. Residences and Other Structures: There are no occupied dwellings or other structures within ¾ mile of the well site.

F. Archaeological, Historical or other Cultural Sites: None were observed in the area

G. Land Use: Grazing, oil and gas production and wildlife habitat.

H. Surface Ownership: Federal

PECOS DISTRICT
CONDITIONS OF APPROVAL

OPERATOR'S NAME:	CHEVRON USA INC
LEASE NO.:	NM25876
WELL NAME & NO.:	12-GETTY 24 FEDERAL
SURFACE HOLE FOOTAGE:	0330' FNL & 0590' FWL
BOTTOM HOLE FOOTAGE LOCATION:	Section 24, T. 22 S., R 31 E., NMPM
COUNTY:	Eddy County, New Mexico

TABLE OF CONTENTS

Standard Conditions of Approval (COA) apply to this APD. If any deviations to these standards exist or special COAs are required, the section with the deviation or requirement will be checked below.

I. GENERAL PROVISIONS

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

II. PERMIT EXPIRATION

If the permit terminates prior to drilling and drilling cannot be commenced within 60 days after expiration, an operator is required to submit Form 3160-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 60 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 60 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 60 day extension.)

III. ARCHAEOLOGICAL, PALEONTOLOGY & HISTORICAL SITES

Any cultural and/or paleontological resource discovered by the operator or by any person working on the operator's behalf shall immediately report such findings to the Authorized Officer. The operator is fully accountable for the actions of their contractors and subcontractors. The operator shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery shall be made by the Authorized Officer to determine the appropriate actions that shall be required to prevent the loss of significant cultural or scientific values of the discovery. The operator shall be held responsible for the cost of the proper mitigation measures that the Authorized Officer assesses after consultation with the operator on the evaluation and decisions of the discovery. Any unauthorized collection or disturbance of cultural or paleontological resources may result in a shutdown order by the Authorized Officer.

IV. NOXIOUS WEEDS

The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, pads, associated pipeline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

V. SPECIAL REQUIREMENT(S)

Stockpile of Topsoil
About 3,200 cubic yards of topsoil must be stockpiled on the south side of the well pad.

Pipeline Placement Requirement:
When following an existing road, the pipeline must be installed no farther than 5 feet from the edge of the road.

Timing Limitation Stipulation / Condition of Approval for lesser prairie-chicken: Oil and gas activities including 3-D geophysical exploration, and drilling will not be allowed in lesser prairie-chicken habitat during the period from March 1st through June 15th annually. During that period, other activities that produce noise or involve human activity, such as the maintenance of oil and gas facilities, pipeline, road, and well pad construction, will be allowed except between 3:00 am and 9:00 am. The 3:00 am to 9:00 am restriction will not apply to normal, around-the-clock operations, such as venting, flaring, or pumping, which do not require a human presence during this period. Additionally, no new drilling will be allowed within up to 200 meters of leks known at the time of permitting. Normal vehicle use on existing roads will not be restricted. Exhaust noise from pump jack engines must be muffled or otherwise controlled so as not to exceed 75 db measured at 30 feet from the source of the noise.

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well. For more installation details, contact the Carlsbad Field Office at 575-234-5972.

VI. CONSTRUCTION

A. NOTIFICATION

The BLM shall administer compliance and monitor construction of the access road and well pad. Notify the Carlsbad Field Office at (575) 234-5909 at least 3 working days prior to commencing construction of the access road and/or well pad.

When construction operations are being conducted on this well, the operator shall have the approved APD and Conditions of Approval (COA) on the well site and they shall be made available upon request by the Authorized Officer.

B. TOPSOIL

The operator shall stockpile the topsoil in a low profile manner in order to prevent wind/water erosion of the topsoil. The topsoil to be stripped is approximately 6 inches in depth. The topsoil will be used for interim and final reclamation.

C. CLOSED LOOP SYSTEM

Tanks are required for drilling operations: No Pits.

The operator shall properly dispose of drilling contents at an authorized disposal site.

D. FEDERAL MINERAL MATERIALS PIT

Payment shall be made to the BLM prior to removal of any federal mineral materials. Call the Carlsbad Field Office at (575) 234-5972.

E. WELL PAD SURFACING

Surfacing of the well pad is not required.

If the operator elects to surface the well pad, the surfacing material may be required to be removed at the time of reclamation.

The well pad shall be constructed in a manner which creates the smallest possible surface disturbance, consistent with safety and operational needs.

F. ON LEASE ACCESS ROADS

Road Width
The access road shall have a driving surface that creates the smallest possible surface disturbance and does not exceed fourteen (14) feet in width. The maximum width of surface disturbance, when constructing the access road, shall not exceed twenty-five (25) feet.

Surfacing
Surfacing material is not required on the new access road driving surface. If the operator elects to surface the new access road or pad, the surfacing material may be required to be removed at the time of reclamation.

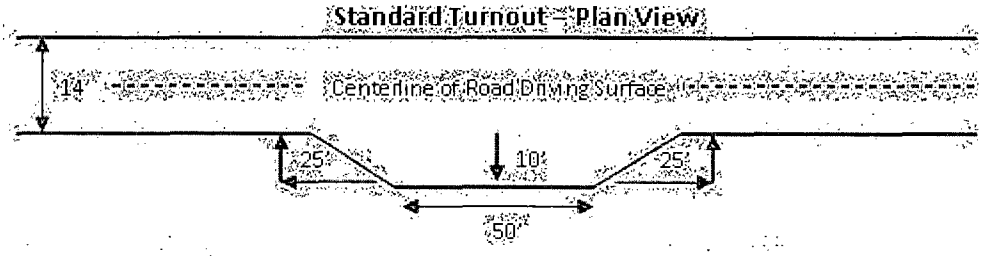
Where possible, no improvements should be made on the unsurfaced access road other than to remove vegetation as necessary, road irregularities, safety issues, or to fill low areas that may sustain standing water.

The Authorized Officer reserves the right to require surfacing of any portion of the access road at any time deemed necessary. Surfacing may be required in the event the road deteriorates, erodes, road traffic increases, or it is determined to be beneficial for future field development. The surfacing depth and type of material will be determined at the time of notification.

Crowning
Crowning shall be done on the access road driving surface. The road crown shall have a grade of approximately 2% (i.e., a 1" crown on a 14' wide road). The road shall conform to Figure 1; cross section and plans for typical road construction.

Ditching
Ditching shall be required on both sides of the road.

Turnouts
Vehicle turnouts shall be constructed on the road. Turnouts shall be intervisible with interval spacing distance less than 1000 feet. Turnouts shall be constructed on all blind curves. Turnouts shall conform to the following diagram:

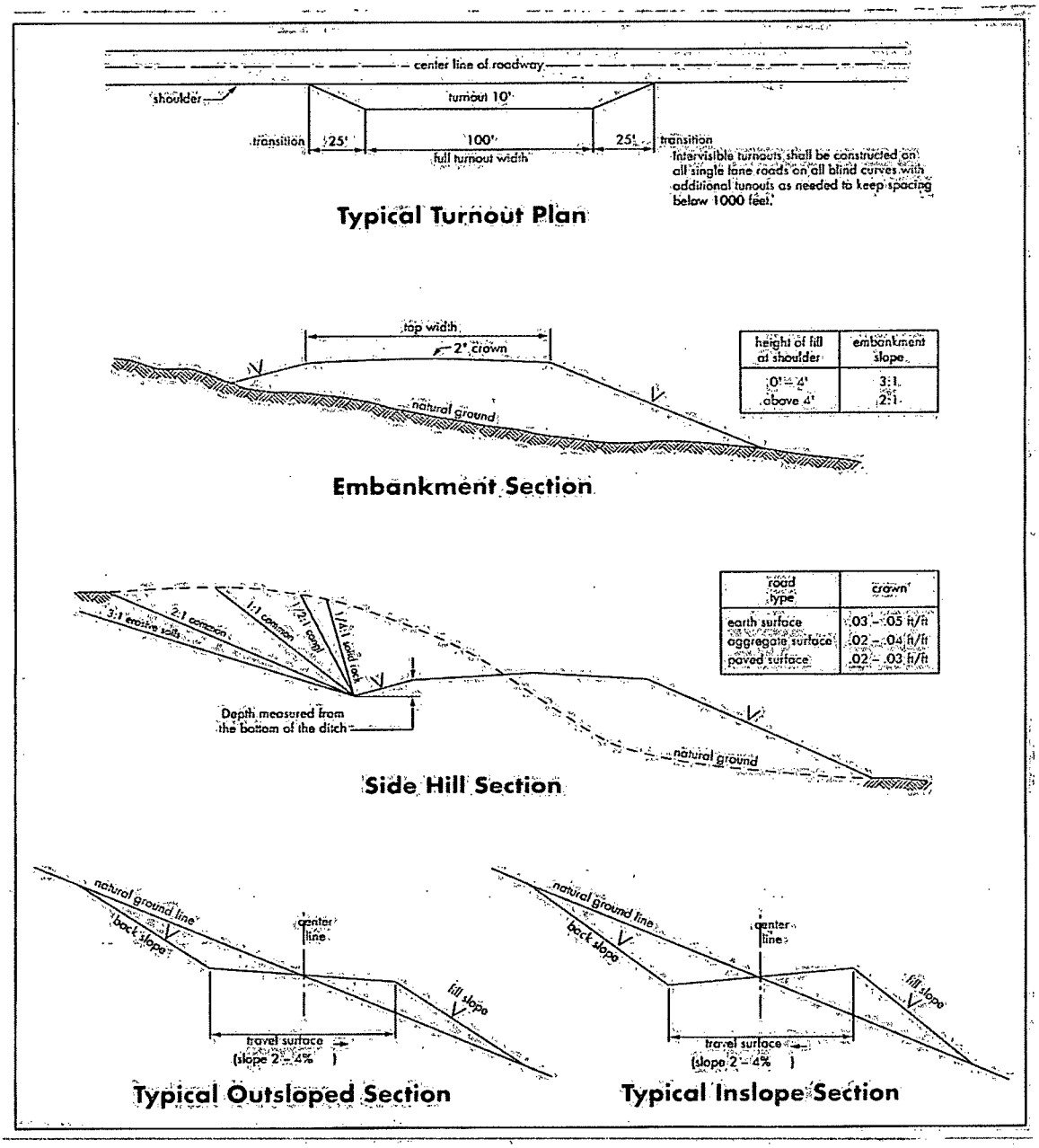


Drainage
Drainage control systems shall be constructed on the entire length of road (e.g. ditches, sidehill outsloping and insloping, lead-off ditches, culvert installation, and low water crossings).

Public Access

Public access on this road shall not be restricted by the operator without specific written approval granted by the Authorized Officer.

Figure 1 – Cross Sections and Plans For Typical Road Sections



VII. DRILLING

A. DRILLING OPERATIONS 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)

☒ **Eddy County**
Call the Carlsbad Field Office, 620 East Greene St., Carlsbad, NM 88220, (575) 361-2822

1. **A Hydrogen Sulfide (H2S) Drilling Plan shall be activated prior to drilling out the surface shoe. 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, provide measured values and formations to the BLM.**

2. 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. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. 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 is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. 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.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. IF OPERATOR DOES NOT HAVE THE WELL SPECIFIC CEMENT DETAILS ONSITE PRIOR TO PUMPING THE CEMENT FOR EACH CASING STRING, THE WOC WILL BE 30 HOURS. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

R-111-P Potash
Possible water flows in the Salado and Castile groups.
Possible lost circulation in the Delaware and Bone Spring formations.

1. The **13-3/8** inch surface casing shall be set at approximately **850** (in a competent bed below the Magenta Dolomite, which is a Member of the Rustler formation, and if salt is encountered, set casing at least 25 feet above the salt) 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 is to include the lead cement slurry.

    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 minimum required fill of cement behind the **8-5/8** inch intermediate casing is: **(Ensure casing is set in the Lamar at approximately 4412')**

   ☒ Cement to surface. If cement does not circulate see B.1.a, c-d above. **Wait on cement (WOC) time for a primary cement job is to include the lead cement slurry due to cave/karst or potash.**

Formation below the 8-5/8" shoe to be tested according to Onshore Order 2.III.B.1.i. Test to be done as a mud equivalency test using the mud weight necessary for the pore pressure of the formation below the shoe (not the mud weight required to prevent dissolving the salt formation) and the mud weight for the bottom of the hole. Report results to BLM office.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

Operator is to submit sundry if DV tool depth varies by more than 100' from approved depth.

   a. First stage to DV tool:

   ☒ Cement to circulate. If cement does not circulate, contact the appropriate BLM office before proceeding with second stage cement job. Operator should have plans as to how they will achieve circulation on the next stage.

   b. Second stage above DV tool:

   ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

4. 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.

5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

C. PRESSURE CONTROL

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. Variance approved to use flex line from BOP to choke manifold. 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.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

3. **Operator has proposed a multi-bowl wellhead assembly. This assembly will only be tested when installed on the surface casing. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the surface casing shoe shall be 5000 (5M) psi. 5M 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.**

    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. **Operator shall perform the intermediate casing integrity test to 70% of the casing burst. This will test the multi-bowl seals.**
    e. **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.**

4. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

    a. **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 plug. However, no tests shall commence until the cement has had a minimum of 24 hours setup time.**

b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 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 water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater, prior to initiating the test (see casing segment as lead cement may be critical item).

c. 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.

d. The results of the test shall be reported to the appropriate BLM office.

e. 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.**

f. 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.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. 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.

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VIII. PRODUCTION (POST DRILLING)

A. WELL STRUCTURES & FACILITIES

Placement of Production Facilities
Production facilities should be placed on the well pad to allow for maximum interim recontouring and revegetation of the well location.

Containment Structures
The containment structure shall be constructed to hold the capacity of the entire contents of the largest tank, plus 24 hour production, unless more stringent protective requirements are deemed necessary by the Authorized Officer.

Painting Requirement
All above-ground structures including meter housing that are not subject to safety requirements shall be painted a flat non-reflective paint color, Shale Green from the BLM Standard Environmental Color Chart (CC-001: June 2008).

B. PIPELINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42

U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to activity of the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. The holder shall be liable for damage or injury to the United States to the extent provided by 43 CFR Sec. 2883.1-4. The holder shall be held to a standard of strict liability for damage or injury to the United States resulting from pipe rupture, fire, or spills caused or substantially aggravated by any of the following within the right-of-way or permit area:

a. Activities of the holder including, but not limited to construction, operation, maintenance, and termination of the facility.

b. Activities of other parties including, but not limited to:

(1) Land clearing.
(2) Earth-disturbing and earth-moving work.
(3) Blasting.
(4) Vandalism and sabotage.

c. Acts of God.

The maximum limitation for such strict liability damages shall not exceed one million dollars ($1,000,000) for any one event, and any liability in excess of such amount shall be determined by the ordinary rules of negligence of the jurisdiction in which the damage or injury occurred.

This section shall not impose strict liability for damage or injury resulting primarily from an act of war or from the negligent acts or omissions of the United States.

5. If, during any phase of the construction, operation, maintenance, or termination of the pipeline, any oil, salt water, or other pollutant should be discharged from the pipeline system, impacting Federal lands, the control and total removal, disposal, and cleaning up of such oil, salt water, or other pollutant, wherever found, shall be the responsibility of the holder, regardless of fault. Upon failure of the holder to control, dispose of, or clean up such discharge on or affecting Federal lands, or to repair all damages resulting therefrom, on the Federal lands, the Authorized Officer may take such measures as he deems necessary to control and clean up the discharge and restore the area, including, where appropriate, the aquatic environment and fish and wildlife habitats, at the full expense of the holder. Such action by the Authorized Officer shall not relieve the holder of any responsibility as provided herein.

6. The pipeline shall be routed no farther than 6 feet from and parallel to existing roads. The authorized right-of-way width will be **20** feet. 14 feet of the right-of-way width will consist of existing disturbance (existing lease roads) and the remaining 6 feet will consist of area adjacent to the disturbance. All construction and maintenance activity will be confined to existing roads.

7. No blading or clearing of any vegetation will be allowed unless approved in writing by the Authorized Officer.

8. The holder shall install the pipeline on the surface in such a manner that will minimize suspension of the pipeline across low areas in the terrain. In hummocky of duney areas, the pipeline will be "snaked" around hummocks and dunes rather then suspended across these features.

9. The pipeline shall be buried with a minimum of **24** inches under all roads, "two-tracks," and trails. Burial of the pipe will continue for 20 feet on each side of each crossing. The condition of the road, upon completion of construction, shall be returned to at least its former state with no bumps or dips remaining in the road surface.

10. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting of the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

11. In those areas where erosion control structures are required to stabilize soil conditions, the holder will install such structures as are suitable for the specific soil conditions being encountered and which are in accordance with sound resource management practices.

12. Excluding the pipe, all above-ground structures not subject to safety requirement shall be painted by the holder to blend with the natural color of the landscape. The paint used shall be a color which simulates "Standard Environmental Colors" – **Shale Green**, Munsell Soil Color No. 5Y 4/2; designated by the Rocky Mountain Five State Interagency Committee.

13. The pipeline will be identified by signs at the point of origin and completion of the right-of-way and at all road crossings. At a minimum, signs will state the holder's name, BLM serial number, and the product being transported. Signs will be maintained in a legible condition for the life of the pipeline.

14. The holder shall not use the pipeline route as a road for purposes other than routine maintenance as determined necessary by the Authorized Officer in consultation with the holder. The holder will take whatever steps are necessary to ensure that the pipeline

route is not used as a roadway.

15. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the authorized officer. Holder shall suspend all operations in the immediate area of such discovery until written authorization to proceed is issued by the authorized officer. An evaluation of the discovery will be made by the authorized officer to determine appropriate cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the authorized officer after consulting with the holder.

16. The operator shall be held responsible if noxious weeds become established within the areas of operations. Weed control shall be required on the disturbed land where noxious weeds exist, which includes the roads, powerline corridor, and adjacent land affected by the establishment of weeds due to this action. The operator shall consult with the Authorized Officer for acceptable weed control methods, which include following EPA and BLM requirements and policies.

C. ELECTRIC LINE

STANDARD STIPULATIONS FOR OVERHEAD ELECTRIC DISTRIBUTION LINES

A copy of the APD and attachments, including stipulations, survey plat and/or map, will be on location during construction. BLM personnel may request to you a copy of your permit during construction to ensure compliance with all stipulations.

Holder agrees to comply with the following stipulations to the satisfaction of the Authorized Officer:

1. The holder shall indemnify the United States against any liability for damage to life or property arising from the occupancy or use of public lands under this grant.

2. The holder shall comply with all applicable Federal laws and regulations existing or hereafter enacted or promulgated. In any event, the holder shall comply with the Toxic Substances Control Act of 1976 as amended, 15 USC 2601 et seq. (1982) with regards to any toxic substances that are used, generated by or stored on the right-of-way or on facilities authorized under this right-of-way grant. (See 40 CFR, Part 702-799 and especially, provisions on polychlorinated biphenyls, 40 CFR 761.1-761.193.) Additionally, any release of toxic substances (leaks, spills, etc.) in excess of the reportable quantity established by 40 CFR, Part 117 shall be reported as required by the Comprehensive Environmental Response, Compensation, and Liability Act, section 102b. A copy of any report required or requested by any Federal agency or State government as a result of a reportable release or spill of any toxic substances shall be furnished to the authorized officer concurrent with the filing of the reports to the involved Federal agency or State government.

3. The holder agrees to indemnify the United States against any liability arising from the release of any hazardous substance or hazardous waste (as these terms are defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, 42 U.S.C. 9601, et seq. or the Resource Conservation and Recovery Act, 42 U.S.C. 6901, et seq.) on the Right-of-Way (unless the release or threatened release is wholly unrelated to the Right-of-Way holder's activity on the Right-of-Way), or resulting from the activity of the Right-of-Way holder on the Right-of-Way. This agreement applies without regard to whether a release is caused by the holder, its agent, or unrelated third parties.

4. There will be no clearing or blading of the right-of-way unless otherwise agreed to in writing by the Authorized Officer.

5. Power lines shall be constructed in accordance to standards outlined in "Suggested Practices for Raptor Protection on Power lines, " Raptor Research Foundation, Inc., 1981. The holder shall assume the burden and expense of proving that pole designs not shown in the above publication are "raptor safe." Such proof shall be provided by a raptor expert approved by the Authorized Officer. The BLM reserves the right to require modification or additions to all powerline structures placed on this right-of-way, should they be necessary to ensure the safety of large perching birds. Such modifications and/or additions shall be made by the holder without liability or expense to the United States.

6. The holder shall minimize disturbance to existing fences and other improvements on public lands. The holder is required to promptly repair improvements to at least their former state. Functional use of these improvements will be maintained at all times. The holder will contact the owner of any improvements prior to disturbing them. When necessary to pass through a fence line, the fence shall be braced on both sides of the passageway prior to cutting the fence. No permanent gates will be allowed unless approved by the Authorized Officer.

7. The BLM serial number assigned to this authorization shall be posted in a permanent, conspicuous manner where the power line crosses roads and at all serviced facilities. Numbers will be at least two inches high and will be affixed to the pole nearest the road crossing and at the facilities served.

8. Upon cancellation, relinquishment, or expiration of this grant, the holder shall comply with those abandonment procedures as prescribed by the Authorized Officer.

9. All surface structures (poles, lines, transformers, etc.) shall be removed within 180 days of abandonment, relinquishment, or termination of use of the serviced facility or facilities or within 180 days of abandonment, relinquishment, cancellation, or expiration of this grant, whichever comes first. This will not apply where the power line extends service to an active, adjoining facility or facilities.

10. Any cultural and/or paleontological resource (historic or prehistoric site or object) discovered by the holder, or any person working on his behalf, on public or Federal land shall be immediately reported to the Authorized Officer. Holder shall suspend all

operations in the immediate area of such discovery until written authorization to proceed is issued by the Authorized Officer. An evaluation of the discovery will be made by the Authorized Officer to determine appropriate actions to prevent the loss of significant cultural or scientific values. The holder will be responsible for the cost of evaluation and any decision as to proper mitigation measures will be made by the Authorized Officer after consulting with the holder.

11. Special Stipulations:
    - For reclamation remove poles, lines, transformer, etc. and dispose of properly.
    - Fill in any holes with soil from the poles removed.

IX. INTERIM RECLAMATION

During the life of the development, all disturbed areas not needed for active support of production operations should undergo interim reclamation in order to minimize the environmental impacts of development on other resources and uses.

Within six (6) months of well completion, operators should work with BLM surface management specialists (Jim Amos: 575-234-5909) to devise the best strategies to reduce the size of the location. Interim reclamation should allow for remedial well operations, as well as safe and efficient removal of oil and gas.

During reclamation, the removal of caliche is important to increasing the success of revegetating the site. Removed caliche that is free of contaminants may be used for road repairs, fire walls or for building other roads and locations. In order to operate the well or complete workover operations, it may be necessary to drive, park and operate on restored interim vegetation within the previously disturbed area. Disturbing revegetated areas for production or workover operations will be allowed. If there is significant disturbance and loss of vegetation, the area will need to be revegetated. Communicate with the appropriate BLM office for any exceptions/exemptions if needed.

All disturbed areas after they have been satisfactorily prepared need to be reseeded with the seed mixture provided below.

Upon completion of interim reclamation, the operator shall submit a Sundry Notices and Reports on Wells, Subsequent Report of Reclamation (Form 3160-5).

X. FINAL ABANDONMENT & RECLAMATION

At final abandonment, well locations, production facilities, and access roads must undergo "final" reclamation so that the character and productivity of the land are restored.

Earthwork for final reclamation must be completed within six (6) months of well plugging. All pads, pits, facility locations and roads must be reclaimed to a satisfactory

revegetated, safe, and stable condition, unless an agreement is made with the landowner or BLM to keep the road and/or pad intact.

After all disturbed areas have been satisfactorily prepared, these areas need to be revegetated with the seed mixture provided below. Seeding should be accomplished by drilling on the contour whenever practical or by other approved methods. Seeding may need to be repeated until revegetation is successful, as determined by the BLM.

Operators shall contact a BLM surface protection specialist prior to surface abandonment operations for site specific objectives (Jim Amos: 575-234-5909).

Ground-level Abandoned Well Marker to avoid raptor perching: Upon the plugging and subsequent abandonment of the well, the well marker will be installed at ground level on a plate containing the pertinent information for the plugged well.

Seed Mixture 2, for Sandy Sites

The holder shall seed all disturbed areas with the seed mixture listed below. The seed mixture shall be planted in the amounts specified in pounds of pure live seed (PLS)* per acre. There shall be no primary or secondary noxious weeds in the seed mixture. Seed will be tested and the viability testing of seed will be done in accordance with State law (s) and within nine (9) months prior to purchase. Commercial seed will be either certified or registered seed. The seed container will be tagged in accordance with State law(s) and available for inspection by the authorized officer.

Seed will be planted using a drill equipped with a depth regulator to ensure proper depth of planting where drilling is possible. The seed mixture will be evenly and uniformly planted over the disturbed area (smaller/heavier seeds have a tendency to drop the bottom of the drill and are planted first). The holder shall take appropriate measures to ensure this does not occur. Where drilling is not possible, seed will be broadcast and the area shall be raked or chained to cover the seed. When broadcasting the seed, the pounds per acre are to be doubled. The seeding will be repeated until a satisfactory stand is established as determined by the authorized officer. Evaluation of growth will not be made before completion of at least one full growing season after seeding.

Species to be planted in pounds of pure live seed* per acre:

Species	lb/acre
Sand dropseed (Sporobolus cryptandrus)	1.0
Sand love grass (Eragrostis trichodes)	1.0
Plains bristlegrass (Setaria macrostachya)	2.0

*Pounds of pure live seed:

Pounds of seed **x** percent purity **x** percent germination = pounds pure live seed