

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

HOBBS OCD

OCT 01 2012

APPLICATION FOR PERMIT TO DRILL OR REENTER

1a. Type of Work. ☒ DRILL ☐ REENTER		5. Lease Serial No NMNM27506	
1b. Type of Well ☒ Oil Well ☐ Gas Well ☐ Other ☐ Single Zone ☒ Multiple Zone		6. If Indian, Allottee or Tribe Name	
2. Name of Operator CHEVRON U.S.A. INC.		7. If Unit or CA Agreement, Name and No.	
3a. Address 15 SMITH ROAD MIDLAND, TX 79705		8. Lease Name and Well No PORTER BROWN 1H	
3b. Phone No. (include area code) Ph: 432-687-7375		9. API Well No. 30-025-40802	
4. Location of Well (Report location clearly and in accordance with any State requirements *) At surface 340FSL 340FEL At proposed prod zone 340FNL 340FEL		10. Field and Pool, or Exploratory SALADO DRAW BONE SPRING WC-025-606 5263319P. BS Upper shale	
14. Distance in miles and direction from nearest town or post office* 20 MILES SW OF JAL, NM		11. Sec, T, R., M., or Blk and Survey or Area Sec 19 T26S R33E Mer NMP	
15. Distance from proposed location to nearest property or lease line, ft (Also to nearest drng unit line, if any) 330'		12. County or Parish LEA COUNTY	
16. No. of Acres in Lease 1518.00 1517.74		13. State NM	
18. Distance from proposed location to nearest well, drilling, completed, applied for, on this lease, ft. 1390'		17. Spacing Unit dedicated to this well 160.00	
19. Proposed Depth 13392 MD 9033 TVD		20. BLM/BIA Bond No on file CA0329	
21. Elevations (Show whether DF, KB, RT, GL, etc.) 3203 GL		22. Approximate date work will start	
23. Estimated duration		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. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above) |
| 2. A Drilling Plan | 5. Operator certification |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office) | 6. Such other site specific information and/or plans as may be required by the authorized officer |

25. Signature (Electronic Submission)	Name (Printed/Typed) DENISE PINKERTON Ph: 432-687-7375	Date 06/28/2012
Title REGULATORY SPECIALIST		
Approved by (Signature) Is/ Don Peterson	Name (Printed/Typed)	Date SEP 28 2012
Title FIELD MANAGER	Office CARLSBAD FIELD 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.

Electronic Submission #141735 verified by the BLM Well Information System
For CHEVRON U.S.A. INC., sent to the Hobbs
Committed to AFMSS for processing by KURT SIMMONS on 07/02/2012 ()

Carlsbad Controlled Water Basin

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

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

OCT 10 2012

BLM 9 Point Drilling Plan

Chevron U.S.A.
Porter Brown 1H
Lea County, New Mexico
Section 19, Twp. 26S, Rge. 33E
340' FSL and 340' FEL (SHL)
340' FNL and 340' FEL (BHL)

(1) Formation Tops

<u>Formation</u>	<u>Depth</u>	
Rustler	788'	
Salado (top of salt)	955'	UPDATED
Castile (Top of salt)	3,065'	UPDATED
Base of Salt	4,853'	
Lamar	4,853'	
Bell Canyon	4,887'	
Cherry Canyon	5,924'	
Brushy Canyon	7,531'	
Bone Spring / Avalon	8,860'	
2 nd Bone Spring	10,500'	
3 rd Bone Spring	11,640'	
Wolfcamp	12,071'	
Strawn	14,800'	
Kick Off Point	8,384'	
Lateral TD (MD)	13,392'	
Lateral Landing TVD	9,100'	
Lateral TD (TVD)	9,033'	

(2) Zones Containing Oil, Gas, Water, and Other Minerals

<u>Formation</u>	<u>Depth</u>	<u>Properties</u>
Cherry Canyon	5,924'	Oil
Brushy Canyon	7,531'	Oil/Gas
Bone Spring/Avalon	8,860'	Oil/Gas
2 nd Bone Spring	10,500'	Oil/Gas
3 rd Bone Spring	11,640'	Oil/Gas
Wolfcamp	12,071'	Oil/Gas

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

(3) Blow-Out Prevention

The wellhead system is a multi-bowl design. 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. 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 will be 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" 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 rams and single rams)
 Annular: 13-5/8" 5M
 13-5/8" 5M Rotating head
 5M Choke Manifold (UPDATED from 10M)

Chevron (operator) requests a variance if H&P 227 (rig name) 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 Design

The operator proposes to drill a horizontal well in the Avalon. We will drill a 17-1/2" hole to ~~845~~ (UPDATED from 800') and 13-3/8", 48#, H-40 casing will be run and cemented to surface. After sufficient W.O.C. time, a 12-1/4" hole will be drilled to ~~5,000'~~ and 9-5/8", 40#, HC K-55 casing will then be run and cemented to surface. After sufficient W.O.C. time, an 8-3/4" vertical hole will be drilled to 12,200' and OH logs will be run. The open hole will be plugged back with a 350' plug on bottom and an open hole cemented whipstock will be set at 8,384' with 1500' of 2-7/8" tailpipe that will be cemented in place. Kick off @ +/-8,384' with an 8-3/4" bit to drill the build section to landing point at 9,509'. Drill 8-1/2" lateral section to 13,392' (MD) and 9,033' (TVD). A 5-1/2", 23#, L-80, CDC casing string will be installed and cemented in place. All casing is new.

Updated for ~~845~~ TD
 825
 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	800' 825	3.6 3.5	2.5 2.4	9.7 9.5
12-1/4"	Int	9-5/8"	40#	HC K-55	LTC	5,000'	1.3	1.9	2.8
8-3/4"	Prod	5-1/2"	23#	L-80	CDC	13,392' 4800	3.4	2.8	1.8

(5) Cementing

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 3rd joint to surface. The production string will have centralizers on every joint in the lateral for the first 1,000' then every other joint through the horizontal to the base of the curve and every 3rd joint through the build section and every 4th joint into the intermediate casing shoe. The casing shoe will not be drilled out until a minimum of 500 psi compressive strength is achieved.

Updated for 815' TD

Casing	Slurry	Sacks	Density ppg	Yield ft ³ /sk	% Excess	TOC
13-3/8" Lead	ExtendaCem CZ	385	13.5	1.72	100%	Surface
13-3/8" Tail	Premium Plus + 2% CaCl	335 375	14.8	1.35	100%	500'
9-5/8" Lead	ExtendaCem CZ	831	12.9	1.84	75%	Surface
9-5/8" Tail	Premium Plus + 1% CaCl	364	14.8	1.34	75%	4,000'
5-1/2" Lead	EconoCem-HLH + 0.2% HR-601 + 0.3% CFR-3 + 5% Salt + 5 lb/sk Kol Seal + 0.125 lb/sk Poly Falke	610	12.7	1.9	35%	4,500'
5-1/2" Tail	50/50 Premium Poz + 0.5% GasStop + 0.5% CFR-3 + 5% Salt	1491	14.8	1.17	35%	7,965'
OH Plug Back	Class "H" Cement + 0.2% CFR-3 + 0.2% Halad-322 + 0.2% HR- 800	936	17.2	0.97	25%	

(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.

Updated for 815' TD

Interval	Mud Type	Density	Viscosity	Fluid Loss
0 – 800' 815'	FW/Spud mud	8.6 – 8.9	32 – 36	NC
800 815 – 5,000'	Brine	10 – 10.1	28 – 30	NC
5,000 – 12,200'	Cut Brine	8.8 – 9.1	28 – 30	NC
Build/Lateral 8,384 – 13,392'	Cut Brine	8.8 – 9.1	28 – 30	NC

(7) Testing, Logging, and Coring See C&A

Logs. Through the Bone Spring/Avalon section run FMI-HD, Sonic Scanner, CMR, Stingray, and Quad Combo. Through Delaware section run Quad Combo and CMR. Run Thru-Bit tools through the lateral and log the horizontal section with quad combo and sonic.

DST's: None planned

Cores: Conventional cores are planned from 9,175-9,375' and from 10,000-10,200'
Sidewall cores are also planned in the Bone Spring and Avalon.

(8) Anticipated Pressures, Abnormal/Hazardous Drilling Conditions

Normal pressures and temperatures are expected to TD. Maximum anticipated bottom hole pressure is approximately 5,600 psi Maximum bottom hole temperature is anticipated to be 150 degrees

(9) Other Facets of the Proposal

Anticipated Start Date:	December 2012
Drilling Days:	50 days
Completion Days:	60 days



Chevron Porter Brown 1H ST01 Rev0 GDS 14-May-2012 Proposal Report



(Def Plan)

Report Date: May 14, 2012 - 02:51 PM
Client: Chevron
Field: NM Lea County (NAD 27)
Structure / Slot: Chevron Porter Brown 1H / Porter Brown 1H
Well: Chevron Porter Brown 1H
Borehole: ST01 Lateral
UWI / API#: Unknown / Unknown
Survey Name: Chevron Porter Brown 1H ST01 Rev0 GDS 14-May-2012
Survey Date: May 14, 2012
Tort / AHD / DDI / ERD Ratio: 91.019° / 4598.592 ft / 5.790 / 0.505
Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 1' 21.25486" W 103° 36' 12.37942"
Location Grid N/E Y/X: N 372701.700 RUS, E 726210.700 RUS
CRS Grid Convergence Angle: 0.38704429°
Grid Scale Factor: 0.9999677

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359.563° (Grid North)
Vertical Section Origin: 0.000 ft; 0.000 ft
TVD Reference Datum: RKB
TVD Reference Elevation: 3228.000 ft above
Seabed / Ground Elevation: 3203.000 ft above
Magnetic Declination: 7.552°
Total Field Strength: 48401.934 nT
Magnetic Dip Angle: 59.930°
Declination Date: May 14, 2012
Magnetic Declination Model: BGM 2011
North Reference: Grid North
Grid Convergence Used: 0.387°
Total Corr Mag North->Grid North: 7.165°
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azimi Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (RUS)	Easting (RUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
Tie-Into gyros	0.00	0.00	359.56	0.00	-3228.00	0.00	0.00	0.00	N/A	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
Marker MudLine	25.00	0.00	359.56	25.00	-3203.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	100.00	0.00	359.56	100.00	-3128.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	200.00	0.00	359.56	200.00	-3028.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	300.00	0.00	359.56	300.00	-2928.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	400.00	0.00	359.56	400.00	-2828.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	500.00	0.00	359.56	500.00	-2728.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	600.00	0.00	359.56	600.00	-2628.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	700.00	0.00	359.56	700.00	-2528.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	800.00	0.00	359.56	800.00	-2428.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	900.00	0.00	359.56	900.00	-2328.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	1000.00	0.00	359.56	1000.00	-2228.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	1100.00	0.00	359.56	1100.00	-2128.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	1200.00	0.00	359.56	1200.00	-2028.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	1300.00	0.00	359.56	1300.00	-1928.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	1400.00	0.00	359.56	1400.00	-1828.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	1500.00	0.00	359.56	1500.00	-1728.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	1600.00	0.00	359.56	1600.00	-1628.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	1700.00	0.00	359.56	1700.00	-1528.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	1800.00	0.00	359.56	1800.00	-1428.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	1900.00	0.00	359.56	1900.00	-1328.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	2000.00	0.00	359.56	2000.00	-1228.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	2100.00	0.00	359.56	2100.00	-1128.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	2200.00	0.00	359.56	2200.00	-1028.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	2300.00	0.00	359.56	2300.00	-928.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	2400.00	0.00	359.56	2400.00	-828.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	2500.00	0.00	359.56	2500.00	-728.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	2600.00	0.00	359.56	2600.00	-628.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	2700.00	0.00	359.56	2700.00	-528.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	2800.00	0.00	359.56	2800.00	-428.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (°/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' '')	Longitude (E/W ° ' '')
	8200.00	0.00	359.56	8200.00	4972.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	8300.00	0.00	359.56	8300.00	5072.00	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
KOP, Build 8"/100ft	8383.80	0.00	359.56	8383.80	5155.80	0.00	0.00	0.00	0.00	372701.70	726210.70	N 32 1 21.25	W 103 36 12.38
	8400.00	1.30	359.56	8400.00	5172.00	0.18	0.18	0.00	8.00	372701.88	726210.70	N 32 1 21.26	W 103 36 12.38
	8500.00	9.30	359.56	8499.49	5271.49	9.41	9.41	-0.07	8.00	372711.11	726210.63	N 32 1 21.35	W 103 36 12.38
	8600.00	17.30	359.56	8596.73	5368.73	32.39	32.38	-0.25	8.00	372734.08	726210.45	N 32 1 21.58	W 103 36 12.38
	8700.00	25.30	359.56	8689.83	5461.83	68.67	68.67	-0.53	8.00	372770.37	726210.17	N 32 1 21.93	W 103 36 12.38
	8800.00	33.30	359.56	8776.97	5548.97	117.57	117.56	-0.91	8.00	372819.26	726209.79	N 32 1 22.42	W 103 36 12.38
	8900.00	41.30	359.56	8856.45	5628.45	178.11	178.11	-1.38	8.00	372879.80	726209.32	N 32 1 23.02	W 103 36 12.38
	9000.00	49.30	359.56	8926.74	5698.74	249.13	249.12	-1.93	8.00	372950.81	726208.77	N 32 1 23.72	W 103 36 12.38
	9100.00	57.30	359.56	8986.46	5758.46	329.24	329.23	-2.56	8.00	373030.92	726208.14	N 32 1 24.51	W 103 36 12.38
	9200.00	65.30	359.56	9034.45	5806.45	416.88	416.86	-3.24	8.00	373118.55	726207.46	N 32 1 25.38	W 103 36 12.38
	9300.00	73.30	359.56	9069.78	5841.78	510.34	510.33	-3.96	8.00	373212.01	726206.74	N 32 1 26.31	W 103 36 12.39
	9400.00	81.30	359.56	9091.75	5863.75	607.82	607.80	-4.72	8.00	373309.48	726205.98	N 32 1 27.27	W 103 36 12.39
LP, Build 1"/100ft	9500.00	89.30	359.56	9099.94	5871.94	707.40	707.38	-5.49	8.00	373409.05	726205.21	N 32 1 28.26	W 103 36 12.39
	9508.80	90.00	359.56	9100.00	5872.00	716.20	716.18	-5.56	8.00	373417.85	726205.14	N 32 1 28.34	W 103 36 12.39
	9600.00	90.91	359.56	9099.27	5871.27	807.39	807.37	-6.27	1.00	373509.04	726204.43	N 32 1 29.24	W 103 36 12.39
Hold to TD	9608.80	91.00	359.56	9099.12	5871.12	816.19	816.17	-6.34	1.00	373517.84	726204.36	N 32 1 29.33	W 103 36 12.39
	9700.00	91.00	359.56	9097.53	5869.53	907.38	907.35	-7.05	0.00	373609.02	726203.65	N 32 1 30.23	W 103 36 12.39
	9800.00	91.00	359.56	9095.79	5867.79	1007.36	1007.33	-7.82	0.00	373709.00	726202.88	N 32 1 31.22	W 103 36 12.39
	9900.00	91.00	359.56	9094.04	5866.04	1107.35	1107.31	-8.60	0.00	373808.98	726202.10	N 32 1 32.21	W 103 36 12.39
	10000.00	91.00	359.56	9092.30	5864.30	1207.33	1207.30	-9.37	0.00	373908.95	726201.33	N 32 1 33.20	W 103 36 12.39
	10100.00	91.00	359.56	9090.55	5862.55	1307.32	1307.28	-10.14	0.00	374008.93	726200.56	N 32 1 34.19	W 103 36 12.39
	10200.00	91.00	359.56	9088.80	5860.80	1407.30	1407.26	-10.91	0.00	374108.91	726199.79	N 32 1 35.18	W 103 36 12.40
	10300.00	91.00	359.56	9087.06	5859.06	1507.29	1507.24	-11.69	0.00	374208.89	726199.01	N 32 1 36.17	W 103 36 12.40
	10400.00	91.00	359.56	9085.31	5857.31	1607.27	1607.22	-12.46	0.00	374308.87	726198.24	N 32 1 37.16	W 103 36 12.40
	10500.00	91.00	359.56	9083.56	5855.56	1707.26	1707.21	-13.23	0.00	374408.85	726197.47	N 32 1 38.15	W 103 36 12.40
	10600.00	91.00	359.56	9081.82	5853.82	1807.24	1807.19	-13.99	0.00	374508.82	726196.71	N 32 1 39.14	W 103 36 12.40
	10700.00	91.00	359.56	9080.07	5852.07	1907.23	1907.17	-14.76	0.00	374608.80	726195.94	N 32 1 40.13	W 103 36 12.40
	10800.00	91.00	359.56	9078.32	5850.32	2007.21	2007.15	-15.53	0.00	374708.78	726195.17	N 32 1 41.12	W 103 36 12.40
	10900.00	91.00	359.56	9076.58	5848.58	2107.20	2107.13	-16.29	0.00	374808.76	726194.41	N 32 1 42.11	W 103 36 12.40
	11000.00	91.00	359.56	9074.83	5846.83	2207.18	2207.11	-17.06	0.00	374908.74	726193.64	N 32 1 43.10	W 103 36 12.40
	11100.00	91.00	359.56	9073.08	5845.08	2307.16	2307.10	-17.82	0.00	375008.72	726192.88	N 32 1 44.09	W 103 36 12.41
	11200.00	91.00	359.56	9071.33	5843.33	2407.15	2407.08	-18.59	0.00	375108.70	726192.11	N 32 1 45.08	W 103 36 12.41
	11300.00	91.00	359.56	9069.59	5841.59	2507.13	2507.06	-19.35	0.00	375208.67	726191.35	N 32 1 46.06	W 103 36 12.41
	11400.00	91.00	359.56	9067.84	5839.84	2607.12	2607.04	-20.11	0.00	375308.65	726190.59	N 32 1 47.05	W 103 36 12.41
	11500.00	91.00	359.56	9066.09	5838.09	2707.10	2707.02	-20.87	0.00	375408.63	726189.83	N 32 1 48.04	W 103 36 12.41
	11600.00	91.00	359.56	9064.34	5836.34	2807.09	2807.01	-21.63	0.00	375508.61	726189.07	N 32 1 49.03	W 103 36 12.41
	11700.00	91.00	359.57	9062.59	5834.59	2907.07	2906.99	-22.39	0.00	375608.59	726188.31	N 32 1 50.02	W 103 36 12.41
	11800.00	91.00	359.57	9060.85	5832.85	3007.06	3006.97	-23.15	0.00	375708.57	726187.55	N 32 1 51.01	W 103 36 12.41
	11900.00	91.00	359.57	9059.10	5831.10	3107.04	3106.95	-23.91	0.00	375808.54	726186.79	N 32 1 52.00	W 103 36 12.41
	12000.00	91.00	359.57	9057.35	5829.35	3207.03	3206.93	-24.66	0.00	375908.52	726186.04	N 32 1 52.99	W 103 36 12.41
	12100.00	91.00	359.57	9055.60	5827.60	3307.01	3306.91	-25.42	0.00	376008.50	726185.28	N 32 1 53.98	W 103 36 12.42
	12200.00	91.00	359.57	9053.85	5825.85	3407.00	3406.90	-26.17	0.00	376108.48	726184.53	N 32 1 54.97	W 103 36 12.42
	12300.00	91.00	359.57	9052.10	5824.10	3506.98	3506.88	-26.93	0.00	376208.46	726183.77	N 32 1 55.96	W 103 36 12.42
	12400.00	91.00	359.57	9050.35	5822.35	3606.97	3606.86	-27.68	0.00	376308.44	726183.02	N 32 1 56.95	W 103 36 12.42
	12500.00	91.00	359.57	9048.60	5820.60	3706.95	3706.84	-28.43	0.00	376408.41	726182.27	N 32 1 57.94	W 103 36 12.42
	12600.00	91.00	359.57	9046.85	5818.85	3806.94	3806.82	-29.18	0.00	376508.39	726181.52	N 32 1 58.93	W 103 36 12.42
	12700.00	91.00	359.57	9045.10	5817.10	3906.92	3906.81	-29.93	0.00	376608.37	726180.77	N 32 1 59.92	W 103 36 12.42
	12800.00	91.00	359.57	9043.35	5815.35	4006.90	4006.79	-30.68	0.00	376708.35	726180.02	N 32 2 0.91	W 103 36 12.42
	12900.00	91.00	359.57	9041.60	5813.60	4106.89	4106.77	-31.43	0.00	376808.33	726179.27	N 32 2 1.90	W 103 36 12.42
	13000.00	91.00	359.57	9039.85	5811.85	4206.87	4206.75	-32.18	0.00	376908.31	726178.52	N 32 2 2.89	W 103 36 12.42
	13100.00	91.00	359.57	9038.10	5810.10	4306.86	4306.73	-32.93	0.00	377008.29	726177.77	N 32 2 3.87	W 103 36 12.42

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS ("/100ft)	Northing (ftUS)	Easting (ftUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
	13200.00	91.00	359.57	9036.35	5808.35	4406.84	4406.71	-33.67	0.00	377108.26	726177.03	N 32 2 4.86	W 103 36 12.42
	13300.00	91.00	359.57	9034.60	5806.60	4506.83	4506.70	-34.42	0.00	377208.24	726176.28	N 32 2 5.85	W 103 36 12.43
Porter Brown 1H PBHL	13391.78	91.00	359.57	9032.99	5804.99	4598.59	4598.46	-35.10	0.00	377300.00	726175.60	N 32 2 6.76	W 103 36 12.43

Survey Type: Def Plan

Survey Error Model: ISCWSA Rev 0 *** 3-D 95.000% Confidence 2.7955 sigma
Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Survey Tool Type	Borehole / Survey
	0.000	25.000	1/100.000	SLB_NSG+MSHOT-Depth Only	ST01 Lateral / Chevron Porter Brown 1H ST01 Rev0 GDS 14-May-2012
	25.000	8385.000	1/100.000	SLB_NSG+MSHOT	ST01 Lateral / Chevron Porter Brown 1H ST01 Rev0 GDS 14-May-2012
	8385.000	13391.778	1/100.000	SLB_MWD-STD	ST01 Lateral / Chevron Porter Brown 1H ST01 Rev0 GDS 14-May-2012



Chevron Porter Brown 1H ST01 Rev0 GDS 14-May-2012 Proposal Report

(Def Plan)

Report Date: May 14, 2012 - 02:50 PM
Client: Chevron
Field: NM Lea County (NAD 27)
Structure / Slot: Chevron Porter Brown 1H / Porter Brown 1H
Well: Chevron Porter Brown 1H
Borehole: ST01 Lateral
UWI / API#: Unknown / Unknown
Survey Name: Chevron Porter Brown 1H ST01 Rev0 GDS 14-May-2012
Survey Date: May 14, 2012
Tort / AHD / DDI / ERD Ratio: 91 019' / 4598 592 ft / 5 790 / 0 505
Coordinate Reference System: NAD27 New Mexico State Plane, Eastern Zone, US Feet
Location Lat / Long: N 32° 1' 21 25486", W 103° 36' 12 37842"
Location Grid N/E Y/X: N 372701 700 NUS, E 726210 700 NUS
CRS Grid Convergence Angle: 0.36704429°
Grid Scale Factor: 0.9929677

Survey / DLS Computation: Minimum Curvature / Lubinski
Vertical Section Azimuth: 359 563' (Grid North)
Vertical Section Origin: 0 000 ft, 0 000 n
TVD Reference Datum: RKB
TVD Reference Elevation: 3228 000 ft above
Seabed / Ground Elevation: 3203 000 ft above
Magnetic Declination: 7.552°
Total Field Strength: 48401 934 nT
Magnetic Dip Angle: 59 930°
Declination Date: May 14, 2012
Magnetic Declination Model: BGGM 2011
North Reference: Grid North
Grid Convergence Used: 0.387°
Total Corr Mag North→Grid North: 7.165°
Local Coord Referenced To: Structure Reference Point

Comments	MD (ft)	Incl (°)	Azim Grid (°)	TVD (ft)	TVDSS (ft)	VSEC (ft)	NS (ft)	EW (ft)	DLS (ft/100ft)	Northing (NUS)	Easting (EUS)	Latitude (N/S ° ' ")	Longitude (E/W ° ' ")
Tie-into cyros	0 00	0 00	359 56	0 00	-3228 00	0 00	0 00	0 00	N/A	372701 70	726210 70	N 32 1 21 25	W 103 36 12 38
Marker MudLins	25 00	0 00	359 56	25 00	-3203 00	0 00	0 00	0 00	0 00	372701 70	726210 70	N 32 1 21 25	W 103 36 12 38
KOP, Build 8"/100ft	8383 80	0 00	359 56	8383 80	5155 80	0 00	0 00	0 00	0 00	372701 70	726210 70	N 32 1 21 25	W 103 36 12 38
LP, Build 1"/100ft	9508 80	00 00	359 56	9100 00	5872 00	716 20	716 18	-5 58	8 00	373417 85	726205 14	N 32 1 28 34	W 103 36 12 39
Hold to TD	9608 80	91 00	359 56	9099 12	5871 12	816 19	816 17	-8 34	1 00	373517 84	726204 36	N 32 1 29 33	W 103 36 12 39
Porter Brown 1H PBHL	13391 78	91 00	359 57	9032 99	5804 99	4598 59	4598 46	-35 10	0 00	377300 00	726175 60	N 32 2 8 76	W 103 36 12 43

Survey Type: Def Plan

Survey Error Model: ISCVSA Rev 0 *** 3-D 95 000% Confidence 2 7955 sigma

Survey Program:

Description	MD From (ft)	MD To (ft)	EOU Freq (ft)	Survey Tool Type	Borehole / Survey
	0 000	25 000	1/100 000	SLB_NSG+MSHOT-Depth Only	ST01 Lateral / Chevron Porter Brown 1H ST01 Rev0 GDS 14-May-2012
	25 000	8385 000	1/100 000	SLB_NSG+MSHOT	ST01 Lateral / Chevron Porter Brown 1H ST01 Rev0 GDS 14-May-2012
	8385 000	13391.778	1/100 000	SLB_MWD-STD	ST01 Lateral / Chevron Porter Brown 1H ST01 Rev0 GDS 14-May-2012



ST01 Rev 0

Chevron

H&P 227

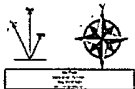
PATHFINDER

A Schlumberger Company

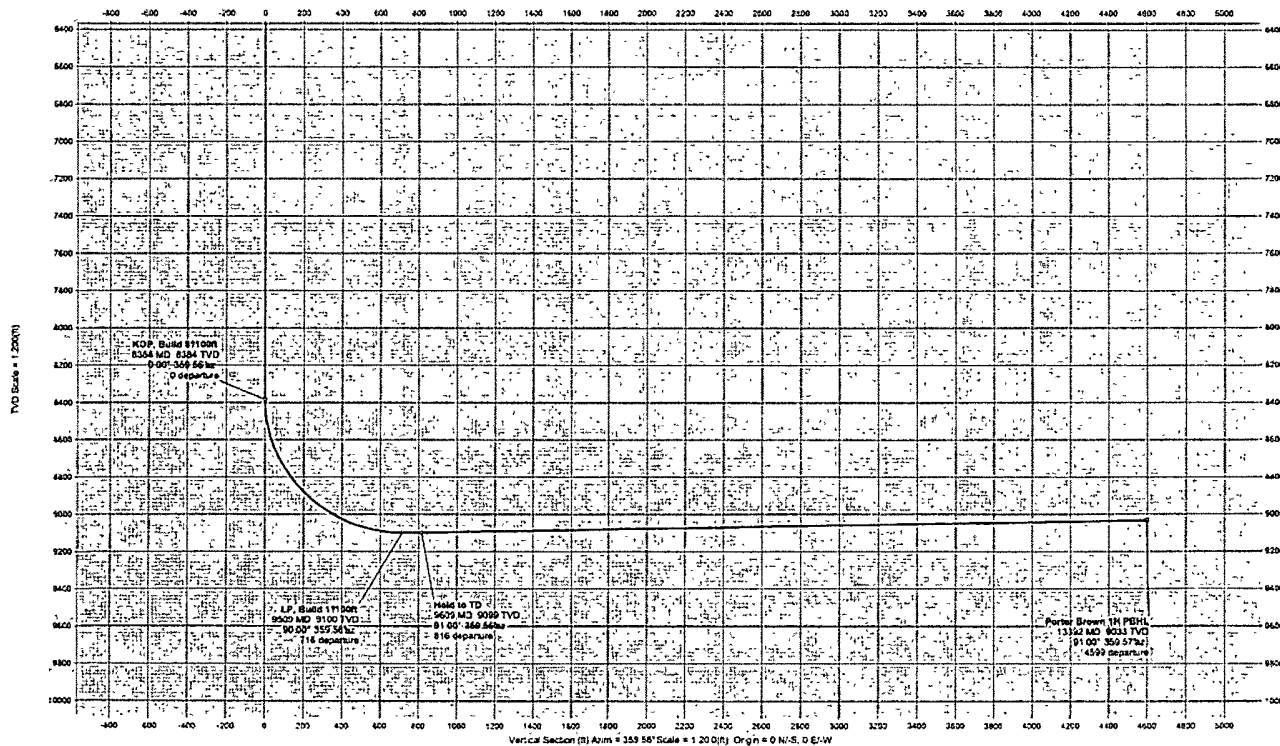
Chevron Porter Brown 1H		NM Lea County (NAD 27)		Chevron Porter Brown 1H	
Map: BGCN 2011	Dip: 59.4 10°	Obs: May 24, 2012	Surface Location: N 32° 11' 21.25" W 103° 36' 12.37" E	Map: Porter Brown 1H	TVS Ref: NAD 27 (shown)
Mag Dec: 1.522°		YS: 63461 NLT	Lat: N 32° 11' 21.25" Long: W 103° 36' 12.37" E	Plan: Chevron Porter Brown 1H	Base Plan: 9-9999-72

Legend

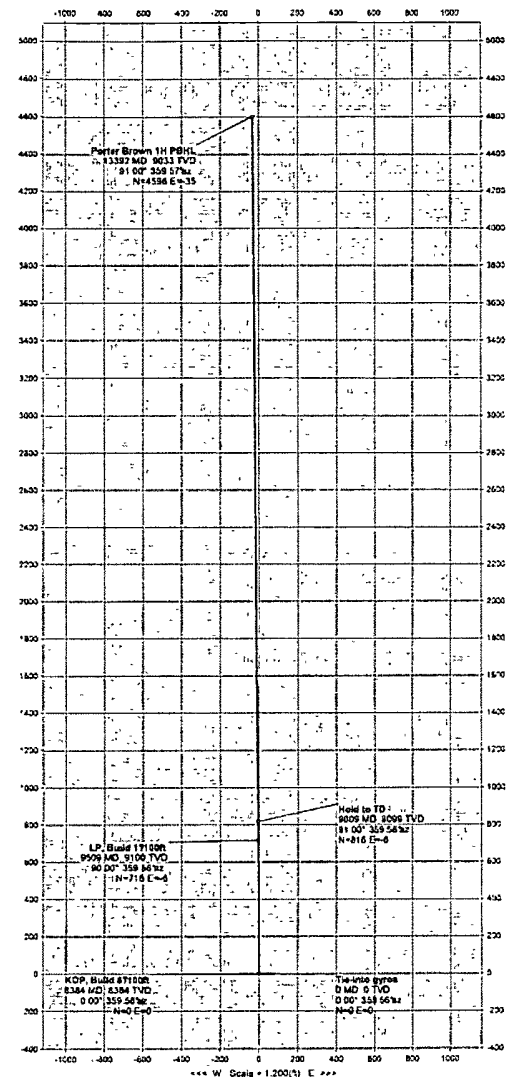
CUT OFF POINTS (COP) AND DEPARTURE POINTS (DP)



Critical Points													
Comments	Survey	Inclination(deg)	Azimuth(deg)	TVS(ft)	Sub-Sea	VS(ft)	NS(ft)	EW(ft)	Latitude(deg)	Longitude(deg)	Easting(M)	Northing(M)	Closure(ft)
Tie-In to gyros	0.00	0.00	359.56	0.00	3228.00	0.00	0.00	0.00	N 32° 11' 21.25" W 103° 36' 12.37" E	726210.70	727201.70	0.00	359.56
Marker ModLine	25.00	0.00	359.56	25.00	3228.00	0.00	0.00	0.00	N 32° 11' 21.25" W 103° 36' 12.37" E	726210.70	727201.70	0.00	359.56
KOP: Build 87100H	8383.80	0.00	359.56	8383.80	5158.82	0.00	0.00	0.00	N 32° 11' 21.25" W 103° 36' 12.37" E	726210.70	727201.70	0.00	359.56
LP: Build 17100H	9508.80	90.00	359.56	9100.00	5072.00	716.20	716.18	-5.98	N 32° 11' 28.34" W 103° 36' 12.38" E	726206.14	72717.85	716.20	359.56
Hold to TD	9608.60	91.00	359.56	9099.12	5071.12	816.19	816.17	-6.34	N 32° 11' 28.33" W 103° 36' 12.38" E	726204.36	72715.60	816.19	359.56
Porter Brown 1H PSH	13391.76	91.00	359.57	9032.99	5804.99	4598.59	4598.48	-35.10	N 32° 11' 2.76" W 103° 36' 12.42" E	726175.60	727300.00	4598.59	359.56

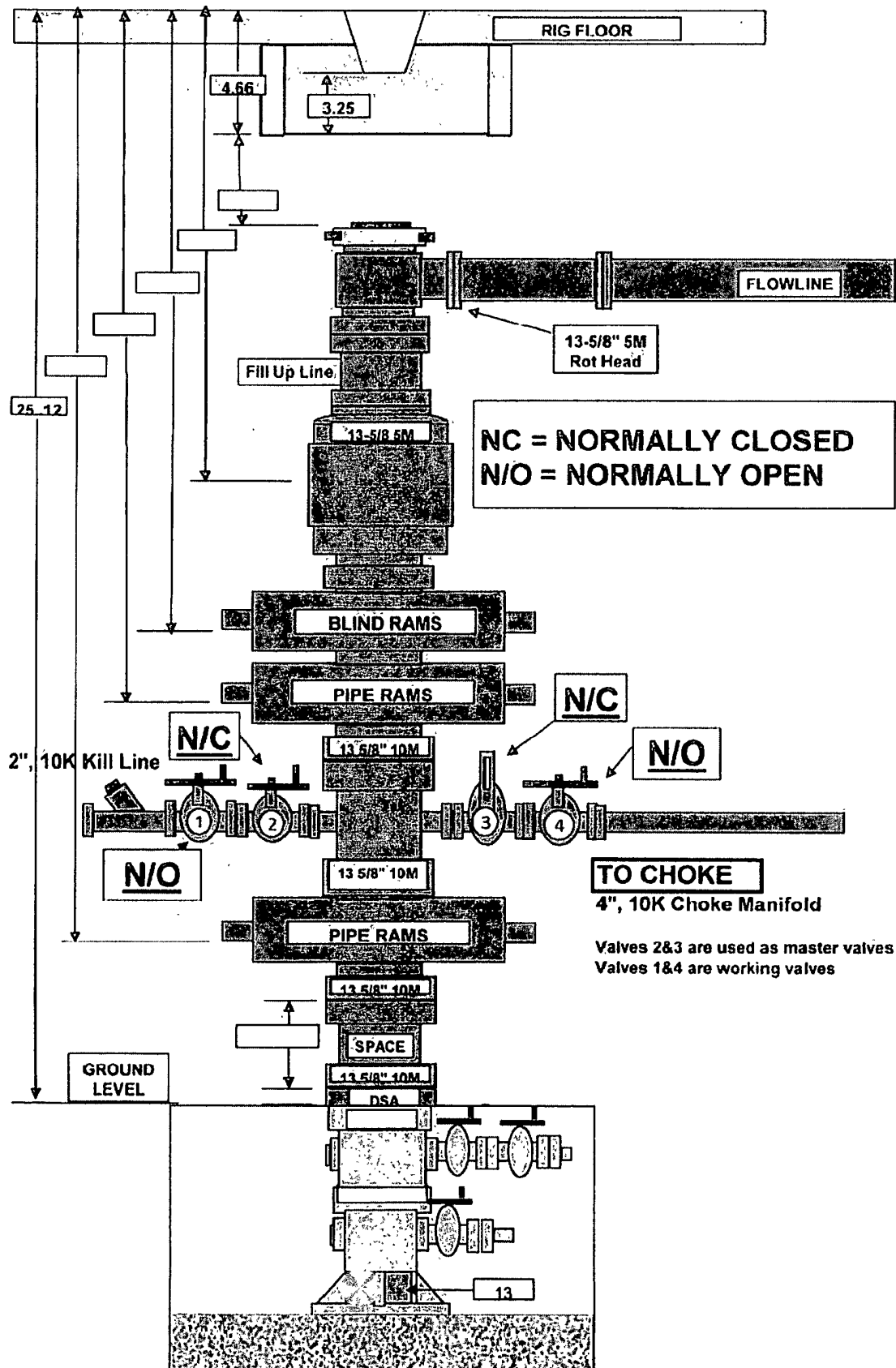


S Scale = 1,200'(ft) N

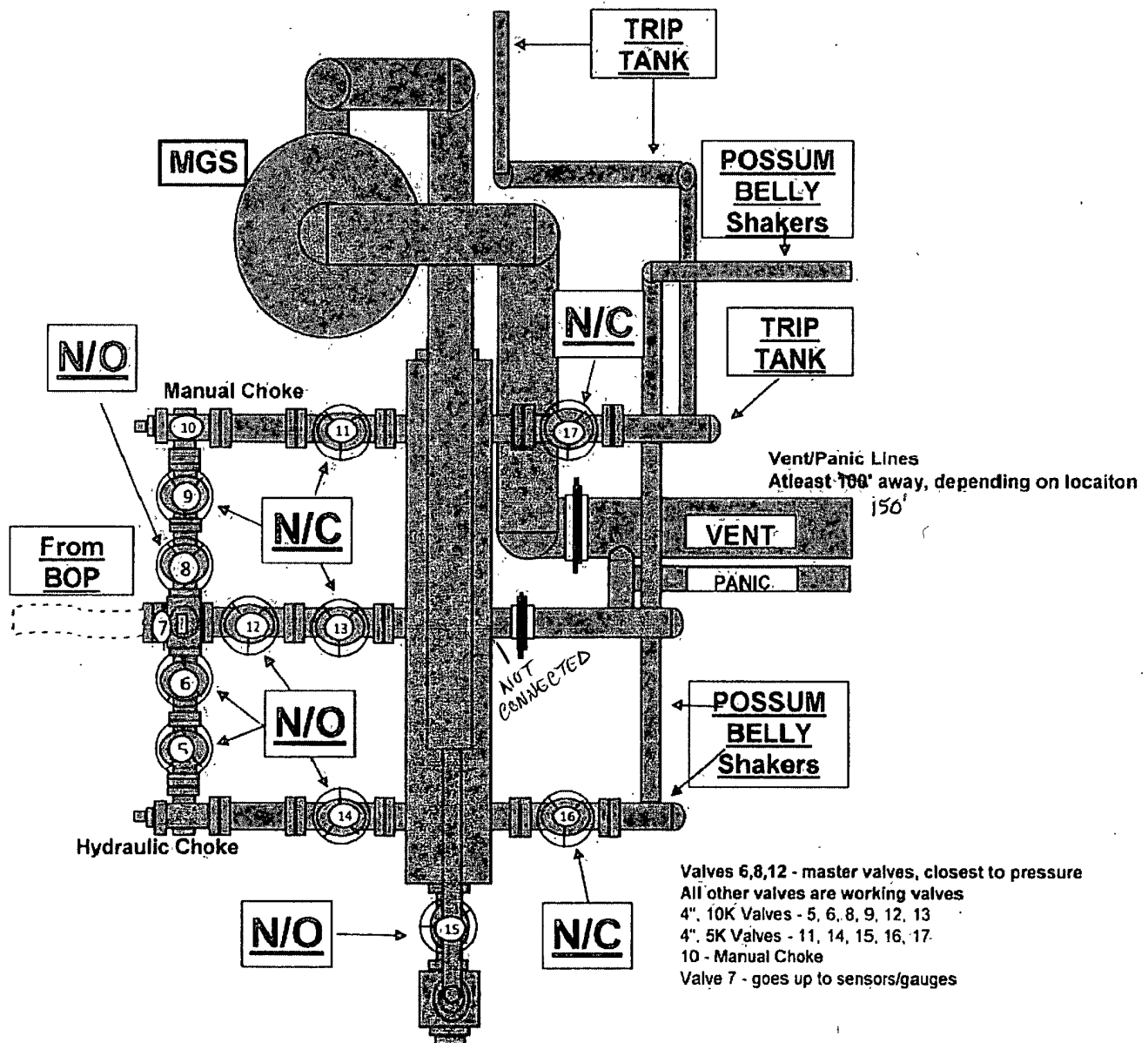


Drawn By: _____
Date Created: May 24, 2012 02:38:32 PM
Checked By: _____
Circled Date: _____
Approval By: _____
Approved Date: _____

H&P 227 BOP Stack



H&P #227 CHOKE MANIFOLD



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

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



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



Delivery Note

ContiTech Beattie Corp

11535 Brittnore Park Drive
Houston, TX 77041
Tel: (832) 327-0141
Fax: (832) 327-0148
E-mail: mail@fluid.contitech.us
www.contitechbeattie.com

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...

All goods remain the property of ContiTech Beattie until paid for in full. Any damage or shortage on this delivery must be advised within 5 days. Returns may be subject to a handling charge.

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	
3" coupling with 4.1/16" 10K API Flange end		1095 1090		AISI 4130 AISI 4130	
				Heat N°	
				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)	



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



U. S. Steel Tubular Products
Product Information
5 1/2 23 lb (0.415) L80
STAR SEAL - CDC™

3/28/2012

MECHANICAL PROPERTIES		Yield Strength	
Pipe Body		Minimum	80 ksi
		Maximum	95 ksi
		Tensile Strength	
(Couplings are Std API)		Minimum	95 ksi
PIPE PROPERTIES			
Dimensions, Nominal	Pipe Outside Diameter	5.500	in.
	Wall	0.415	in.
	Pipe Inside Diameter	4.670	in.
	Pipe Drift - API	4.545	in.
		Nominal Linear Weight, T&C	23.00 lbs/ft
		Pipe Cross Sectional Area	6.630 sq. in.
Performance Properties	Minimum Pipe Body Yield Strength	530	1,000 lbs
	Minimum Collapse Pressure	11,160	psi
	Minimum Internal Yield Pressure	10,560	psi
CONNECTION PROPERTIES			
Dimensions, Nominal	Connection Outside Diameter	6.050	in.
	Connection Inside Diameter	4.670	in.
	Connection Drift - API	4.545	in.
	Makeup Loss	4.63	in.
	Critical Area	6.099	sq in.
	Joint Efficiency	100.0	%
Performance Properties	Joint Strength	550	1,000 lbs
	Compression Rating	330	1,000 lbs
	Minimum Collapse Pressure	11,160	psi
	Minimum Internal Yield Pressure	8,990	psi
	Maximum Uniaxial Bend Rating	41.5	deg/100 ft
	Connection Yield Torque	15,200	ft - lbs
Recommended Torque Values	Minimum Makeup Torque	10,000	ft - lbs
	Maximum Makeup Torque	12,500	ft - lbs

* Note: Verification of connection shoulder is required. Typical shoulder range 5,000 - 7,500 ft - lbs

* STAR SEAL - CDC (Casing Drilling Connection) is a Modified API Buttress threaded and coupled connection designed for field proven in drilling with casing applications. Star Seal is a registered trademark of U. S. Steel Corporation. All material contained in this publication is for general information only. This material should not therefore, be used or relied upon for any specific application without independent competent professional examination and verification of its accuracy, suitability and applicability. Anyone making use of this material does so at their own risk and assumes any and all liability resulting from such use. U. S. Steel disclaims any and all expressed or implied warranties of fitness for any general or particular application. USS Product Data Sheet 2012 rev9 (February 14)

U. S. Steel Tubular Products, Inc. - 600 Grant Street, Pittsburgh, PA 15219

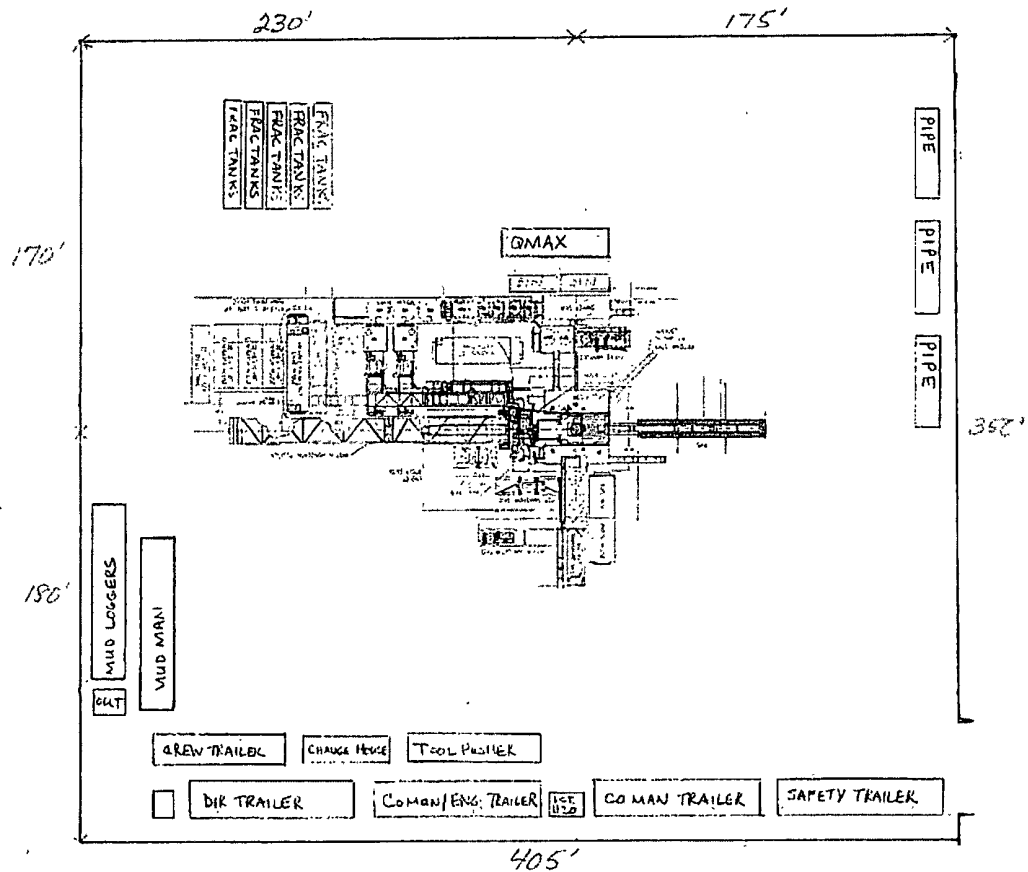
www.uss.com

Operating & 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

Closure Plan

- Drilled cuttings will be removed from the cuttings bins/tanks using a backhoe and placed in a suitable transport container if required. Boxes may be hauled off and replaced as needed.
- Drilled cuttings will be disposed of at a suitable off-location waste facility



Porter Brown 1H

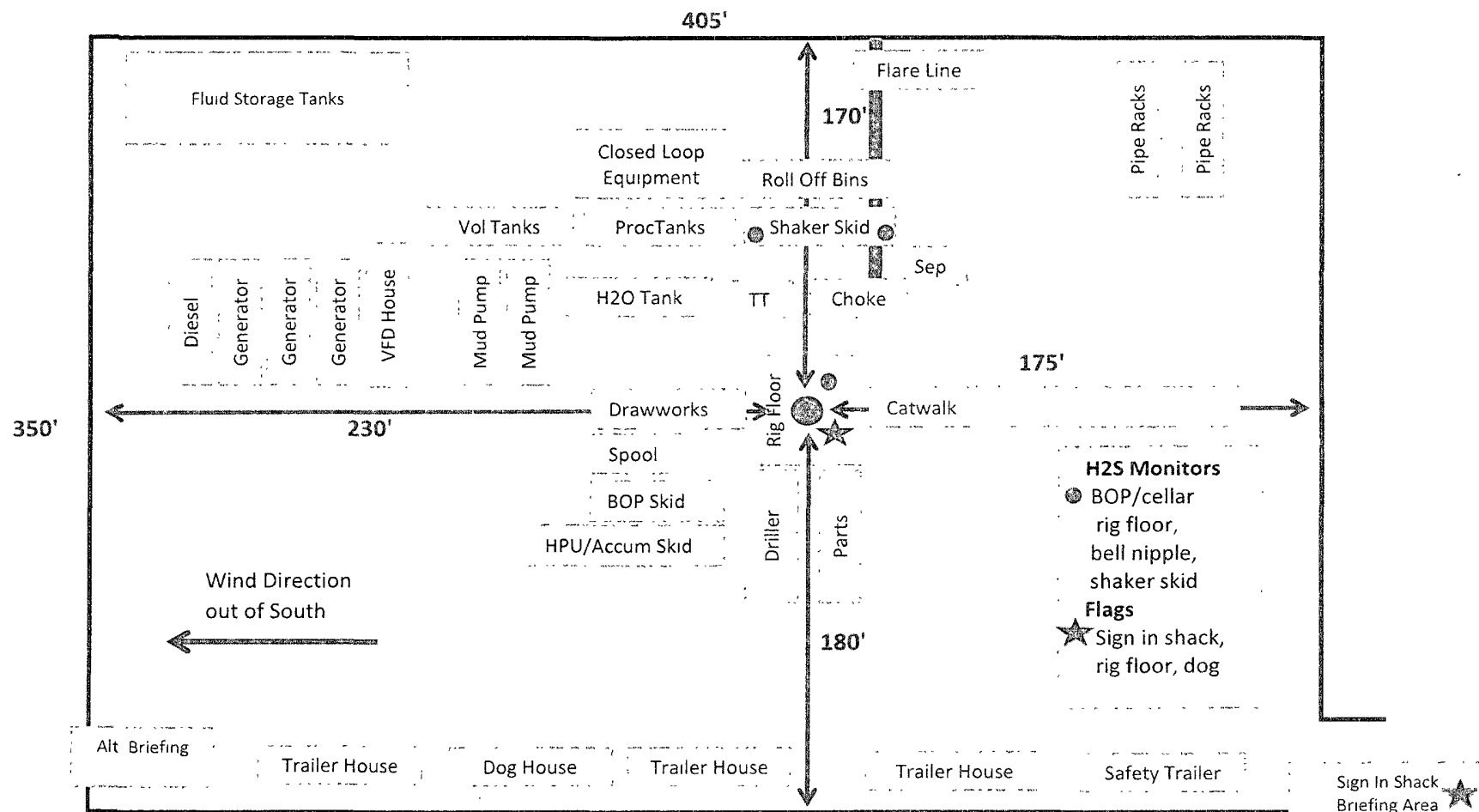
= 50'



North

Porter Brown 1H

*Not to Scale



10 Minute Escape Packs:

- 1 @ Pits
- 1 @ Trip Tank
- 1 @ Accumulator
- 4 @ Rig Floor

45 Minute SCBA

- 2 @ Briefing Area
- 2 @ Alt Briefing Area