DIST. 3

Form 3160 - 3 (April 2004)

# UNITED STATES DEPARTMENT OF THE INTERIOR 2007 APR 30 AM BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB 12/10/137 Expires Murci 31 100 C

APPLICATION FOR PERMIT TO	6. If Indian, Allotee	or Tribe Name			
la. Type of work: 🗸 DRILL REENT	ER	ZIU FARTIN	GTON A	M If Unit or CA Agre	eement, Name and No.
lb. Type of Well: Oil Well Gas Well Other	Sir	ngle ZoneMulti	ple Zone	8. Lease Name and WBDGU 1829	
2. Name of Operator Hess Corporation 495				9. APL Well 102/-	-20412
3a. Address P.O. Box 840 Seminote, TX 79360 3b. Phone No. (include area code) (432) 758-6738			10. Field and Pool, or Exploratory West Bravo Dome CDG Unit /67.		
At surface location clearly and in accordance with at 1200' FSL & 1800' FEL Sec. 3, T18  At proposed prod. zone same		ents.*)		11. Sec., T. R. M. or E Sec. 3, T18N,	Blk. and Survey or Area
4. Distance in miles and direction from nearest town or post office*				12. County or Parish Harding	13. State NM
5. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of a 34,655.33		17. Spacin	Unit dedicated to this	well
B. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  4330'	19. Proposed Depth 20. BLM/ 3100' 62196		BIA Bond No. on file		
Elevations (Show whether DF, KDB, RT, GL, etc.) 5384' DF	22. Approximate date work will start* 07/15/2007			23. Estimated duration 7 days	on .
	24. Attac	chments			
ne following, completed in accordance with the requirements of Onsho  Well plat certified by a registered surveyor.  A Drilling Plan.  A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).		4. Bond to cover to Item 20 above). 5. Operator certification.	the operation cation specific info	ns unless covered by an	existing bond on file (see
5. Signature Woodl	I	(Printed/Typed) Carol J. Moore			Date 04/20/2007
Sr. Advisor/Regulatory  oproved by (Signature)	Name Office	(Printed/Typed)			Date /2/17/0
Application approval does not warrant or certify that the applicant hole onduct operations thereon.	ds legal or equit	table title to those right	nts in the sub	ect lease which would e	entitle the applicant to

\*(Instructions on page 2)

This action is subject to technical and procedural review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4

DRILLING OPERATIONS AUTHORIZED ARE SUBJECT TO COMPLIANCE WITH ATTACHED "GENERAL REQUIREMENTS".

NMOCD

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.

SEE ATTACHED FOR CONDITIONS OF APPROVAL

State of New Mexico Energy, Minerals and Natural Resources Department

Form C-102 Revised October 12, 2005

Submit to Appropriate District Office

State Lease - 4 Copies

AM 8: 21

DISTRICT III 1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV 1220 S. St. Francis Dr., Santa Fe, NM 87505

API Number

OIL CONSERVATION DIVISIONAPR 30
1220 South St. Francis Dr.
Santa Fe, New Mexico 87505

Pool Code

RECEIVED AMENDED REPORT 210 FARMINGTON NM

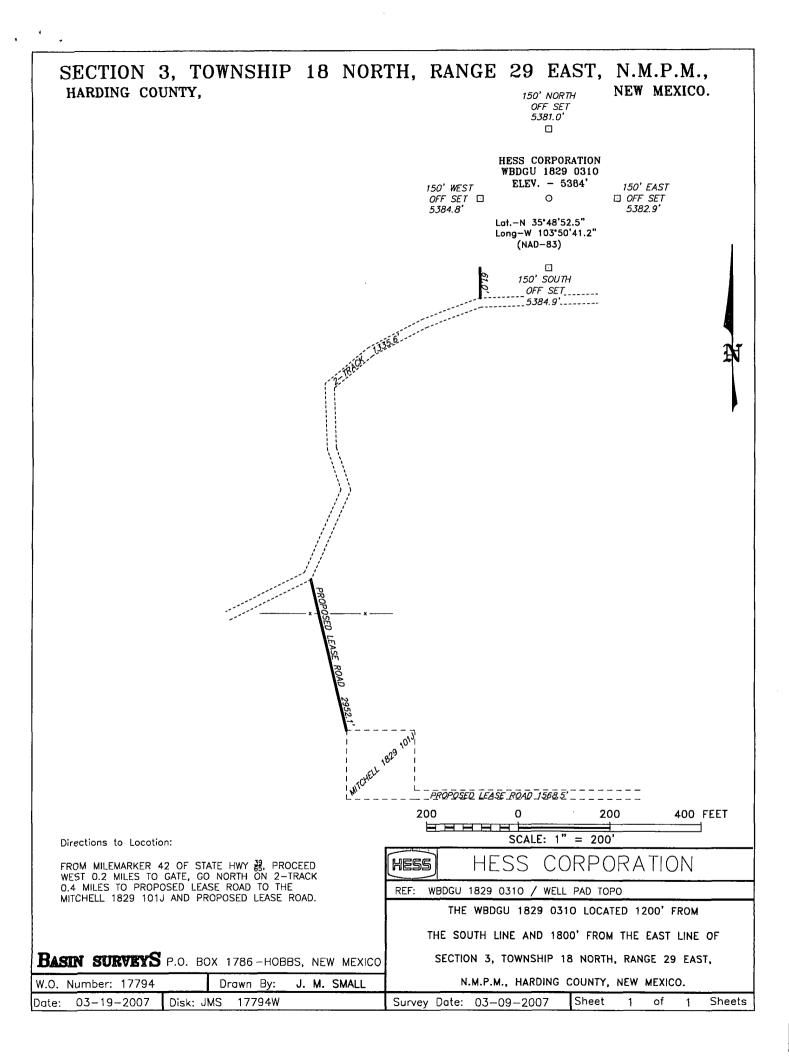
Pool Name

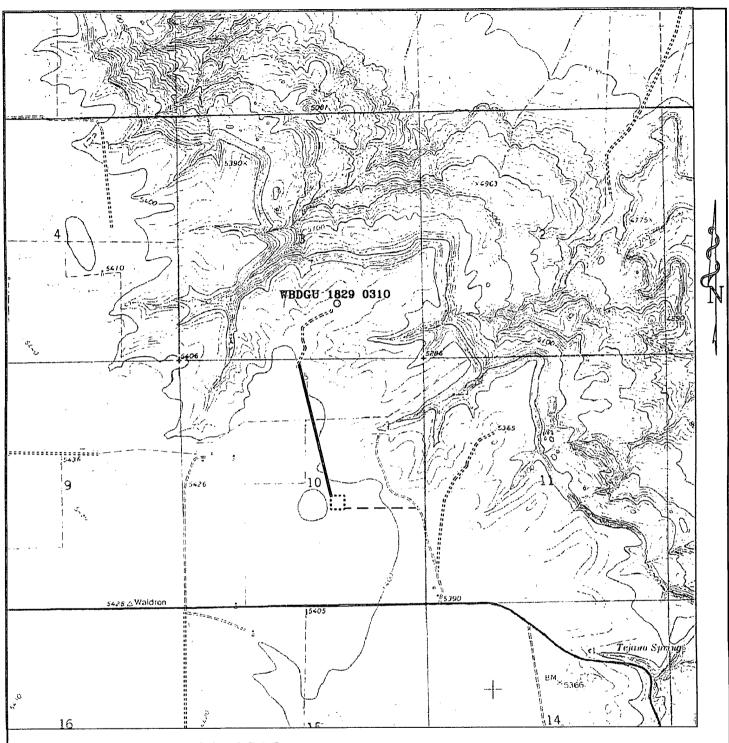
### WELL LOCATION AND ACREAGE DEDICATION PLAT

Property (	Code		Property Name WBDGU 1829						umber 10
OGRID No	o.		Operator Name HESS CORPORATION					Elevation 5384'	
					Surface Loca	ation			
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
0	3	18 N	N 29 E 1200 SOUTH 1800				EAST	HARDING	
	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 Acre	s Joint o	or Infill   Co.	nsolidation	Code Or	der No.				

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

 OR A NON-STAN	DARD UNIT HAS BEE	N APPROVED BY TH	E DIVISION
			OPERATOR CERTIFICATION  I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief, and that this organization either owns a working interest or unleased mineral interest in the land including the proposed bottom hole location pursuant to a contract with an owner of such a mineral or working interest, or to a voluntary pooling agreement or a compulsory pooling order heretofore entered by the division.  Carol J. Moore Sr. Advisor/Regulatory  Printed Name  SURVEYOR CERTIFICATION
	Lat - N35°48'52.5" Long - W103°50'41.2" (NAD-83)	1800'	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 supervison and that the same is true and correct to the best of my belief.  MARCHES 2007  Date Surveys  Professional surveys  BASIN SURVEYS





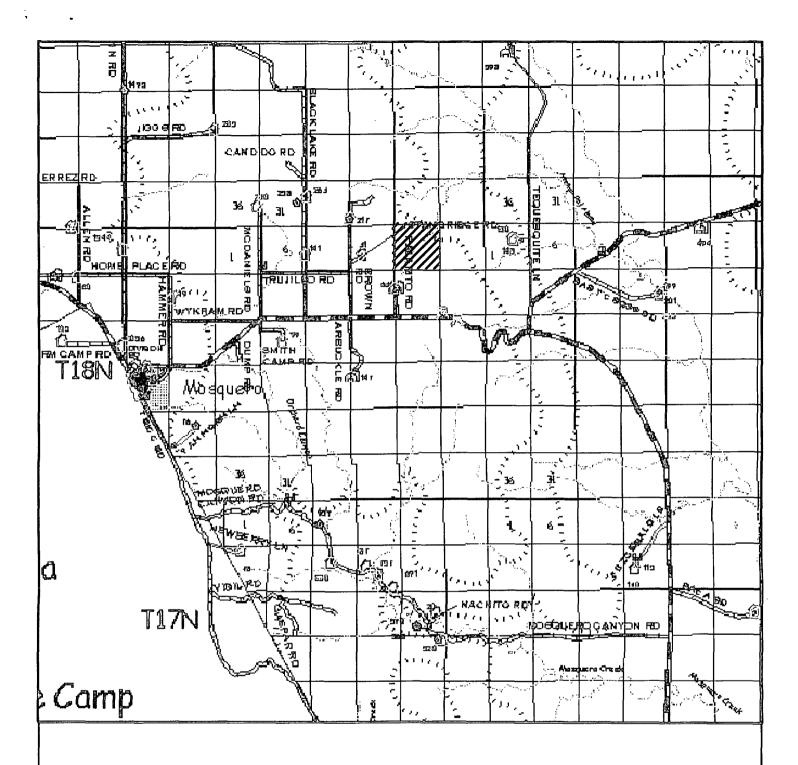
WBDGU 1829 0310 Located 1200' FSL and 1800' FEL Section 3, Township 18 North, Range 29 East, N.M.P.M., Harding County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 - Office (505) 392-3074 - Fax basinsurveys.com

W.O. Number: JMS 17794T	
Survey Date: 03-09-2007	
Scale: 1" = 2000'	
Date: 03-19-2007	





WBDGU 1829 0310 Located 1200' FSL and 1800' FEL Section 3, Township 18 North, Range 29 East, N.M.P.M., Harding County, New Mexico.



P.O. Box 1786 1120 N. West County Rd. Hobbs, New Mexico 88241 (505) 393-7316 — Office (505) 392-3074 — Fax basinsurveys.com

W.O. Number:	JMS	17794TR	
Survey Date:	03-0	9-2007	
Scole: 1" = 2	MILES		
Date: 03-19-	-2007		



## **HESS CORPORATION**

# U.S. ONSHORE PRODUCTION / MAJOR PROJECTS WEST BRAVO DOME FIELD

## **DRILLING PLAN**

WBDGU 1829 #0310

UNIT O, SEC. 3, T18N R29E

HARDING COUNTY, NEW MEXICO

## WBDGU 1829 #0310 DRILLING PLAN

## 1. ESTIMATED FORMATION TOPS:

<u>Formation</u>	MD / TVD	SSTVD
Quaternary Alluvium	0'	+5383'
Permian Tubb Sand	2826'	+2557'
Precambrian Granite	3033'	+2350'

## 2. ESTIMATED DEPTH OF GROUND WATER:

Ground water is estimated to be between 940' and 1075'. Surface casing will be 8 5/8", 24#, run to a depth of 1750' and cemented to surface. Production casing will be 4 1/2", 11.6#, and cemented from TD to surface.

## 3. PRESSURE CONTROL EQUIPMENT:

BOP - SHAFFER LWP Double Ram Preventor

9" - 3000 psi

Dual Choke Manifold 3" - 3000 psi

Shop made Accumulatory – 80 gal

10 3/4" - 8 rd x 9" x 3000 psi flange

1" x 20' steel flex hoses and 1" pipes

## 4. Surface casing:

Lead 700 sx cement

Tail 150 sx cement

Production casing:

Lead 251 sx cement

Tail 248 sx cement

## 5. MW Type:

Fresh water MW: 8.4 - 8.8

## 6. Coring:

No mechanical sidewall cores are planned. E-logs from TD to surface.

Open hole logging below surface casing with:

Platform Express = PEX w/ HRLA Laterolog resistivity/CNL/LDT/GR.

All logs will be run on the standard 2" & 5" depth scale presentation when applicable.

## 7. POTENTIAL DRILLING PROBLEMS:

None noted.

8. Drill a vertical well to test prospective Tubb Sandstone (Permian/ Leonard) and Granite Wash (Permo-Penn) carbon dioxide bearing gas reservoirs in our West Bravo Dome gas field. This carbon dioxide field is actually the SW corner of the giant Bravo Dome gas field, having 10 TCF original in place gas reserves. The subject well will be drilled to a proposed total depth of 3,060' MD that will be sufficient to allow us to penetrate the Precambrian Granite basement and have ±50' of rat hole to log.

The objective of this well is to penetrate the Tubb Sandstone reservoir at a location having approximately 70' of net pay. This thick net pay should insure that we have a carbon dioxide well capable of flowing  $\geq$ 2 MMCFPD. The proposed well will encounter the Tubb Sandstone at a depth of 2,826' MD (+2,557' SS).

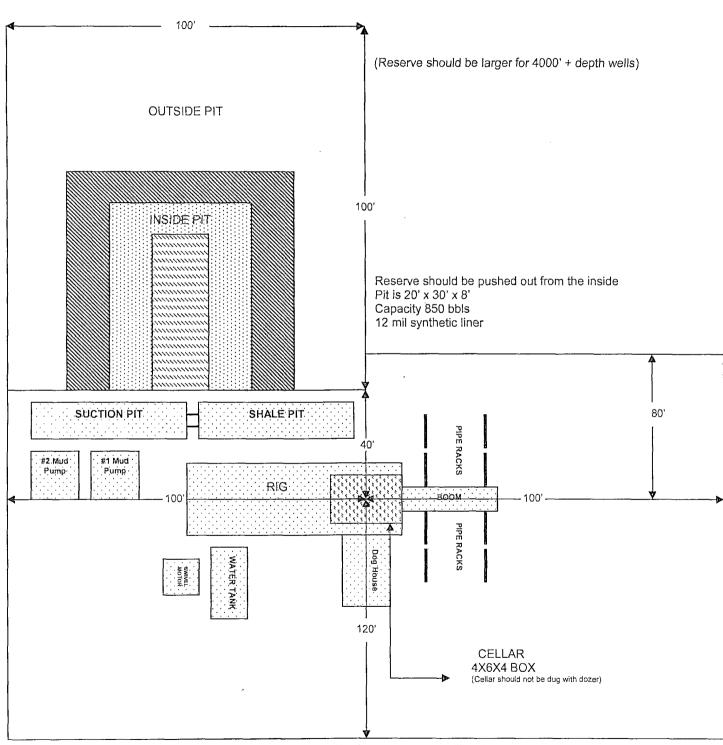
## **COMPLETION PROCEDURE:**

- a. DRILLING TO FLUSH WITH CLEAN 6% KCL. Install master valve with bull plug before leaving location. Leave well shut in.
- b. Install full opening master valve. MIRU Perforators. Run GR/CCL/CBL logs across minimum. Perf Tubb.
- c. Rig up for frac. Install flowback manifold and flowback tank. Frac well. Flowback immediately.
- d. Clean up location. Install fence around well and meter run.
- g. Shut in well until needed.



# LOCATION SPECIFICATION AND RIG LAYOUT FOR STEEL PITS

(PICTURE NOT TO SCALE)



Cellar can be 4X4X4 if using a screw-on wellhead

## WBDGU 1829 #031O

Surface Ownership

JMB Trust c/o Mary Byrd 63 Pajarito Rd Mosquero, NM 87733

•			İ	i	
DATĖ IN	SUSPENSE	ENGINEER	LOGGED IN	TYPE	APP NO.

ABOVE THIS LINE FOR DIVISION USE ONLY

## NEW MEXICO OIL CONSERVATION DIVISION

- Engineering Bureau -

1220 South St. Francis Drive, Santa Fe, NM 87505



## ADMINISTRATIVE APPLICATION CHECKLIST

THIS CHECKLIST IS MANDATORY FOR ALL ADMINISTRATIVE APPLICATIONS FOR EXCEPTIONS TO DIVISION RULES AND REGULATIONS WHICH REQUIRE PROCESSING AT THE DIVISION LEVEL IN SANTA FE [NSL-Non-Standard Location] [NSP-Non-Standard Proration Unit] [SD-Simultaneous Dedication]

**Application Acronyms:** [DHC-Downhole Commingling] [CTB-Lease Commingling] [PLC-Pool/Lease Commingling] [PC-Pool Commingling] [OLS - Off-Lease Storage] [OLM-Off-Lease Measurement] [WFX-Waterflood Expansion] [PMX-Pressure Maintenance Expansion] [SWD-Salt Water Disposal] [IPI-Injection Pressure Increase] [1] TYPE OF APPLICATION - Check Those Which Apply for [A] Location - Spacing Unit - Simultaneous Dedication [A] $\boxtimes$  NSL  $\square$  NSP  $\square$ Check One Only for [B] or [C] Commingling - Storage - Measurement [B]DHC  $\square$  CTB  $\square$  PLC  $\square$  PC  $\square$  OLS  $\square$  OLM Injection - Disposal - Pressure Increase - Enhanced Oil Recovery [C] ☐ WFX ☐ PMX ☐ SWD ☐ IPI ☐ EOR ☐ PPR [D]Other: Specify [2] **NOTIFICATION REQUIRED TO:** - Check Those Which Apply, or Does Not Apply [A] Working, Royalty or Overriding Royalty Interest Owners [B]Offset Operators, Leaseholders or Surface Owner [C] Application is One Which Requires Published Legal Notice [D]Notification and/or Concurrent Approval by BLM or SLO U.S. Bureau of Land Management - Commissioner of Public Lands, State Land Office For all of the above, Proof of Notification or Publication is Attached, and/or, [E][F]Waivers are Attached SUBMIT ACCURATE AND COMPLETE INFORMATION REQUIRED TO PROCESS THE TYPE [3] OF APPLICATION INDICATED ABOVE. **CERTIFICATION:** I hereby certify that the information submitted with this application for administrative approval is accurate and complete to the best of my knowledge. I also understand that no action will be taken on this application until the required information and notifications are submitted to the Division. Note: Statement must be completed by an individual with managerial and/or supervisory capacity. Carol J. Moore Sr. Advisor/Regulatory 4/20/2007 Print or Type Name Title Date

cmoore@hess.com

e-mail Address



# 2007 JUN 13 AM 10: 59

HESS CORPORATION P.O. Box 840 Seminole, TX 79360

Carol J. Moore

Regulatory Analyst (432) 758-6738 FAX: (432) 758-6768



June 11, 2007

United States Department of the Interior Bureau of Land Management 1235 La Plata Highway, Suite A Farmington, New Mexico 87401

Dear Mr. Lovato:

Enclosed please find responses to the deficiencies identified on the original APDs submitted for the following wells:

- 1) WBDGU 1829 0310, SWSE SEC. 3, T18N, R29E
- 2) WBDGU 1829 111F, SENW SEC. 11, T18N, R29E
- 3) WBDGU 1929 341G, SWNE SEC. 34, T19N, R29E

Please let me know if you need any additional information at your earliest convenience.

Sincerely,

Carol J. Moore Sr. Advisor/Regulatory

Enclosures:

Surface Use Plan w/maps

Cut and Fill diagrams

**BOP** diagram

Drilling Plan w/cement Surface Use Agreement Plan of Development

#### WBDGU 1829 #0310 UNIT O, SEC. 3, T18N R29E

- 1. <u>EXISTING ROADS</u>: Please see attached map. Existing roads will be maintained in the same or better condition.
- 2. <u>ACCESS ROADS TO BE CONSTRUCTED/RECONSTRUCTED:</u> Please see attached map. Proposed road will be graded to a width of 20'. One fence (as shown on map) will be cut with gate and cattle guard installed as per landowner request. Natural drainage will be utilized with no bridges or culverts required.
- 3. LOCATION OF EXISTING WELLS: None within 1 mile radius
- 4. <u>FACILITIES</u>: Please see attached map.
- 5. <u>LOCATION OF WATER SUPPLY:</u> Water will be trucked from Mitchell's pond located in Sec. 10, T18N R29E
- 6. <u>CONSTRUCTION MATERIALS</u>: Dirt and caliche will be used for road and pad construction as requested by land owner.
- 7. <u>WASTE DISPOSAL</u>: Please see attached pit diagram. Test fluids will be trucked to approved disposal facility.
- 8. <u>ANCILLARY FACILITIES:</u> Camp will be located at the West Bravo Dome Compressor Station plant site as indicated on attached map.
- 9. WELL SITE LAYOUT: Please see attached layout, plat, and diagrams.
- 10. <u>PLANS FOR RECLAMATION OF SURFACE:</u> Reclamation of the surface will be per landowner specifications. Top soil will be scraped and stockpiled for re-use upon well completion. Roads will be maintained and locations reseeded as requested by landowner. Surface use agreement attached.
- 11. SURFACE OWNERSHIP:

J & B Trust c/o Mary Byrd 63 Pajarito Rd

Mosquero, NM 87733

- 12. OTHER INFORMATION: None
- 13. OPERATOR'S CERTIFICATION:

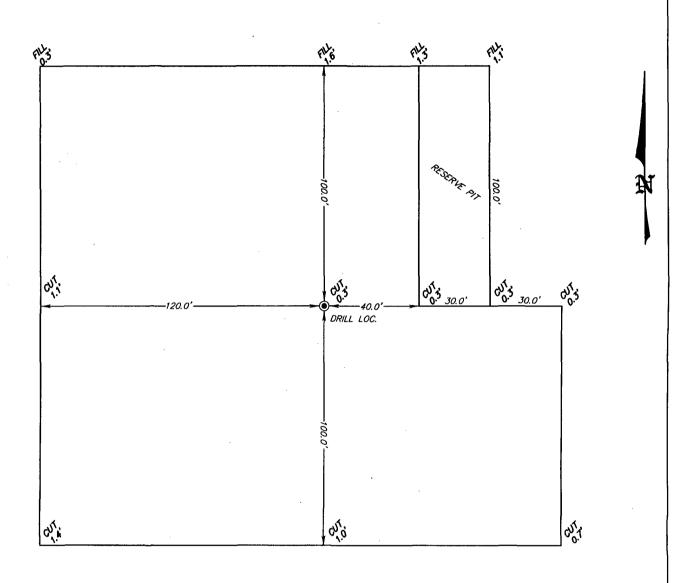
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with operations proposed herein will be performed by <a href="Hess Corporation">Hess Corporation</a> 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.

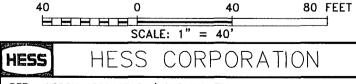
Name and Title:

Carol J. Moore

Sr. Advisor/Regulatory

SECTION 3, TOWNSHIP 18 NORTH, RANGE 29 EAST, N.M.P.M., NEW MEXICO. HARDING COUNTY, 150' NORTH OFF SET 5381.0 HESS CORPORATION WBDGU 1829 0310 ELEV. - 5384' 150' WEST OFF SET □ 150' EAST ☐ OFF SET 5384.8' 5382.9' Lat.-N 35'48'52.5" Long-W 103'50'41.2" (NAD-83) 150' SOUTH OFF SET\_\_\_\_\_ 5384.9'-----PROPOSED LEASE ROAD 1568.5' 200 200 O 400 FEET HHHHH SCALE: 1" = 200Directions to Location: HESS CORPORATION FROM MILEMARKER 42 OF STATE HWY 33, PROCEED WEST 0.2 MILES TO GATE, GO NORTH ON 2-TRACK 0.4 MILES TO PROPOSED LEASE ROAD TO THE REF: WBDGU 1829 0310 / WELL PAD TOPO MITCHELL 1829 101J AND PROPOSED LEASE ROAD. THE WBDGU 1829 0310 LOCATED 1200' FROM THE SOUTH LINE AND 1800' FROM THE EAST LINE OF BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO SECTION 3, TOWNSHIP 18 NORTH, RANGE 29 EAST, N.M.P.M., HARDING COUNTY, NEW MEXICO. W.O. Number: 17794 J. M. SMALL Drawn By: Date: 03-19-2007 Disk: JMS 17794W Survey Date: 03-09-2007 Sheet Sheets SECTION 3, TOWNSHIP 18 NORTH, RANGE 29 EAST, N.M.P.M., HARDING COUNTY, NEW MEXICO.





REF: WBDGU 1829 0310 / CUT AND FILL

THE WBDGU 1829 0310 LOCATED 1200' FROM
THE SOUTH LINE AND 1800' FROM THE EAST LINE OF
SECTION 3, TOWNSHIP 18 NORTH, RANGE 29 EAST,

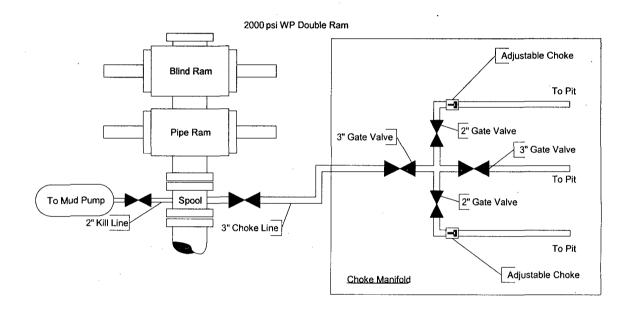
N.M.P.M., HARDING COUNTY, NEW MEXICO.

BASIN SURVEYS P.O. BOX 1786—HOBBS, NEW MEXICO
W.O. Number: 17794 Drawn By: J. M. SMALL

Date: 03-19-2007 Disk: JMS 17794CF Survey Date: 03-09-2007 Sheet 1 of 1 Sheets

WBDGU 1829 0310, SEC. 3, T18N, R29E WBDGU 1829 111F, SEC 11, T18N, R29E WBDGU 1929 341G, SEC. 34, T19N, R29E

## <u>Capstar -</u> <u>BOPE</u>



## WBDGU 1829 #0310 DRILLING PLAN

## 1. ESTIMATED FORMATION TOPS:

<u>Formation</u>	MD / TVD	SSTVD
Quaternary Alluvium	0'	+5383'
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## 3. PRESSURE CONTROL EQUIPMENT:

BOP - SHAFFER LWP Double Ram Preventor

9" – 3000 psi

Dual Choke Manifold 3" - 3000 psi

Shop made Accumulatory – 80 gal

10 3/4" - 8 rd x 9" x 3000 psi flange

1" x 20' steel flex hoses and 1" pipes

#### 4. Surface casing:

Lead 700 sx cmnt P Plus 13.5# w/4% Bentonite, 2% CACL2 @ 5.5 BPM

Tail 150 sx cmnt P Plus 14.8# 2% CALC2 @ 5 BPM - returns to surface

#### Production casing:

Lead 251 sx cmnt Midcon2 P Plus @ YLD-2.93 CFS & 11.4 ppg

Tail 248 sx cmnt @ YLD-1.85 CFS & 13.2 ppg – returns to surface

## 5. MW Type:

Fresh water MW: 8.4 - 8.8

## 6. Coring:

No mechanical sidewall cores are planned. E-logs from TD to surface.

Open hole logging below surface casing with:

Platform Express = PEX w/ HRLA Laterolog resistivity/CNL/LDT/GR.

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## **COMPLETION PROCEDURE:**

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- b. Install full opening master valve. MIRU Perforators. Run GR/CCL/CBL logs across minimum. Perf Tubb.
- c. Rig up for frac. Install flowback manifold and flowback tank. Frac well. Flowback immediately.
- d. Clean up location. Install fence around well and meter run.
- g. Shut in well until needed.

## SURFACE USE AGREEMENT

#### INTRODUCTION

This Agreement is dated and made effective April 16, 2007 (hereinafter referred to as "this Agreement"). The parties are JMB Trust, c/o Mary K. Byrd, Trustee ("JMB"), and Hess Corporation ("Hess"), formerly Amerada Hess Corporation ("AHC"), a Delaware corporation.

### BACKGROUND

Hess is the owner of certain leasehold situated in Harding County, New Mexico, within the boundaries of the West Bravo Dome Gas Unit ("WBDGU"), for purposes of this Agreement being defined to include all lands owned or leased by James K. Byrd, etal ("Byrd"), now JMB, pursuant to the Oil and Gas Lease Agreement dated September 15, 1981 ("the lease") between Byrd and Hess, and any other surface lands either now or hereafter owned or leased by JBM (collectively referred to as "JMB Lands") from the State of New Mexico and the U.S.A., the minerals of which are leased and committed to the WBDGU. Hess is also the owner of additional leasehold on the eastern edge of the WBDGU which is leased from T. E. Mitchell & Son, Inc. All leases described in this Background section are referred to as "the Leases" The Leases are for the purpose of developing, marketing and transporting carbon dioxide from or through the premises covered by the Leases.

In order to achieve accommodation of the mutual and conflicting interests of the parties to this Agreement and in consideration of the mutual promises and covenants contained in this Agreement, it is agreed by and between the parties as follows:

Subject to the terms and conditions set forth below in Paragraph VI, and in consideration of the mutual covenants set forth below, JMB grants to Hess the right and privilege to use existing roads and to construct, as necessary, new roads on JMB lands to allow Hess, for itself, its successors and assigns, and its agents, servants and employees, independent contractors and their agents, servants and employees, to obtain ingress to and egress from the JMB Lands whether or not under lease, together with the right to lay, operate, maintain, repair and remove pipelines to gather carbon dioxide produced and saved under and pursuant to the terms of the Leases.

II.

JMB grants to Hess the right and privilege of removing caliche from existing pits or pits which JMB may, in writing, authorize Hess to open on the Lands for use by Hess in complying with its obligations under this Agreement and the Leases.

III.

Unless JMB otherwise hereafter agrees in writing, Hess with respect to all operations within the confines of the JMB Lands, shall:

- (a) When requested by JMB, bury pipelines below plow depth.
- (b) Conduct no operations within 500 feet of a house or barn in existence on the date of this Agreement, and conduct no operations within ½ mile of the JMB lands or JMB headquarters, except in the drilling, completion and production of wells drilled within such ½ mile distance.
- (c) Use no chemical or apply no manufactured chemical substances on roads, drill sites and rights-of-way.

- (d) Pay JMB actual damages to improvements situated on the JMB Lands and personal property situated on the JMB Lands that may be caused by operations conducted by or for Hess.
- (e) Utilize lands having a width of no more than 50 feet at any time or point for pipelines across the JMB Lands; and for ingress thereto or egress there from to use only existing roads and the pipeline right-of-way itself.
- (f) In carrying on any operations on the JMB Lands, prevent the contamination of any and all waters in surface tanks or storage tanks and any and all surface and subsurface water bearing strata situated on the leased premises; prevent contamination of the surface of the leased premises from substances used by Hess, and fence out all drilling, slush or other pits which Hess may create or cause to be on such land so that the fluids therein or damaging substances, including pit liners, will at all times be unavailable to livestock on JMB Lands. After each well is completed, the well will be fenced by Hess with fencing adequate to turn livestock.
- (g) As soon as feasible: fill and level all drilling mud and water pits used in drilling operations; ditch all buried pipelines so as to replace the original top soil at the surface. Restore all drill sites and pipeline rights-of-way, to the maximum extent practicable, to original land contours and soil condition.
- (h) In laying pipelines, make no cuts in the grass turf on JMB Lands except as necessary to enable pipeline laying machinery to operate; and with respect to such pipelines, promptly fill and restore all sinkholes as may develop.
- (i) While a road is being used for pipeline laying operations, keep the portion of the road so used adequately watered down to prevent the excessive raising of dust.
- (i) Keep all creek and gully crossings traversed by Hess both graded and passable.
- (k) Place single lane cattle guards, set in concrete, at all fence crossings, and in doing so, set a cattle guard box set on concrete having a depth of at least three feet beneath the surface, and construct double bar H-frames on each side of the proposed cattle guard site before cutting the fence to install the cattle guard; and thereafter keep such cattle guards cleaned out at all times to prevent passage of livestock there over. With respect to all cattle guards used by Hess, Hess shall install, when requested by JMB, a swinging arm approximately three feet above the surface which can be locked or otherwise secured. At each cattle guard location, a conventional 14' wide cattle gate will be installed abutting the cattle guard.
- (l) In all work, construction and maintenance activities on JMB Lands, prevent soil washing and erosion and promptly repair such as may occur.

- (m) Permit no firearms on JMB Lands; permit no discharging of firearms; and permit no hunting thereon by Hess or any of its invitees.
- (n) Promptly pick up and remove all trash introduced onto JMB Lands by Hess or its invitees.
- (o) Permit no consumption of alcoholic beverages on JMB Lands by Hess or its invitees.
- (p) Permit no fires on JMB Lands.
- (q) Forthwith close and secure all gates opened by Hess or its invitees.
- (r) Maintain metal trash containers at all work sites while such work is in progress.
- (s) Permit no dumping of trash or fluids of any sort except at such disposal sites, if any, as may have been designated by JMB as such.
- (t) Maintain and enforce a speed limit for all vehicles on JMB Lands for vehicles of Hess and its invitees of not to exceed 30 miles per hour, or such lesser speed as necessary to prevent the raising of excess dust.
- (u) Provide portable toilets at all drilling sites while drilling and completion operations are being conducted, and otherwise use or dig no latrines at a depth sufficient to penetrate water bearing formations no deeper than 15 feet beneath the surface.
- (v) If requested by JMB, equip cattle guards at public roads with gates that can be locked.
- (w) Upon termination of the purposes of this Lease, Hess shall leave cased and in good condition for use by JMB such water wells as Hess may be authorized to drill on JMB lands.
- (x) Use no part of the JMB lands to store machinery, equipment, pipe or other property while it is not being used; and use no part of JMB lands to house employees or other personnel, except temporarily at well sites while wells are being drilled or completed on such well site.
- (y) Within 180 days after the Leases have terminated, either in whole or in part, remove all machinery, equipment and fixtures placed on the land as to which the Leases have terminated, and within 180 days after a pipeline or a flow line placed on JMB Lands shall cease to be connected to a producing well, remove such as have not been buried below ordinary plow depth, unless agreed upon by JMB and Hess to be left for the express use and disposition by JMB.

For the rights and privileges herein granted including rights of ingress and egress to lands owned by JMB, Hess agrees to pay to JMB the following sums:

- (a) For each well hereafter drilled by Hess within the confines of JMB Lands an amount equal to \$4,000.00 per well location. An amount equal to \$5,000.00 for each mile of new road (which is not pipeline right-of-way) required to be constructed by Hess to obtain ingress and egress to such well. These sums shall be due to be paid for future wells to be drilled at or before the time the drilling of each such well commences.
- (b) For each pipeline to be laid or replaced on lands within the confines of JMB, the sum of \$35 per linear rod of pipeline, if such pipeline shall have a diameter of eight inches or less; and \$70 per linear rod for all pipeline having a diameter in excess of eight inches, to be paid before work commences. Above payments shall cover the right-of-way, Hess' reseeding obligation, and surface damages.
- (c) The sum of \$3.25 cents per cubic yard of caliche removed from existing caliche pits or pits hereafter opened as provided herein, when such caliche is applied to roads or facilities on JMB Lands, caliche volumes shall be calculated and paid within ten (10) days after the close of the calendar month in which such caliche is used.
- (d) To pay all actual damages for breach of the covenants herein contained, which payment shall be due to be paid as of the date such damage occurs.

The fixed dollar schedule of payments hereinabove set forth shall be adjusted annually by the Consumer Price Index published by the Bureau of Labor Statistics, U.S. Department of Labor. The adjusted rate shall be rates currently in use, plus or minus the computed adjustment.

VI.

Roadways, Pipelines, Power and Telephone Lines: JMB through the Lease and this Agreement hereby grants to Hess the following rights with respect to JMB Lands, whether or not

such acreage is under lease to Hess, to which such rights are reasonably necessary for the development and operation of the leased premises for the purposes of the Leases:

- Roadways. The right to construct and maintain roadways; provided, however, Hess will utilize existing roadways over and across JMB Lands before constructing additional new roadways, wherever practicable; will construct new and maintain existing roads on JMB Lands used by Hess at all times as private, crowned, all-weather roads which shall at no time and at no point, with the exception of reasonably necessary turnouts, exceed a width of 20 feet, unless approval from JMB is obtained.
- (b) <u>Pipelines</u>. The right to construct and maintain pipelines.
- (c) <u>Power Lines</u>. The right to construct and maintain power lines over and across JMB Lands; provided, however, in the event that power lines in addition to those now existing are deemed necessary by Lessee, the same shall be either buried, or located pursuant to a mutual agreement between Lessee and JMB.
- (d) <u>Telephone Lines</u>. The right to construct and maintain telephone lines provided such are telephone lines buried beneath the surface of the earth.
- (e) Consultation Between JMB and Hess. With regard to the items set forth in subparagraphs (a) through (d) hereinabove, it is understood between the parties that JMB has an interest in the location and construction of these items which will be located on JMB Lands. To this end, the parties hereto agree that they will consult with one another in an effort to arrive at an orderly plan for locating these items in a manner which is practicable for purposes of the operation on JMB Lands and which is practicable for the purposes of Hess under the Leases.

#### VII.

Hess shall not, either directly or indirectly, compete with JMB to acquire grazing leases within the confines of JMB.

#### VIII.

The rights and duties of Hess under this Agreement are appurtenant to the Leases and shall be binding upon and shall inure to the benefit of Hess and its successors and to its assignees of the Leases or parts thereof. An assignment of the Leases by Hess, either in whole or in part,

shall, to the extent of the assignment of the Leases relieve and discharge Hess of its obligations under this Agreement with respect to the land assigned, but by acceptance of such assignment the assignee shall be deemed to have assumed all of the duties and obligations of Hess with respect to the property assigned. This Agreement shall be binding upon and shall inure to the benefit of JMB, its successors and assigns.

IN WITNESS WHEREOF this Agreement has been executed as of the date first above written.

JMB TRUST ("Lessor")

By: Mary K Byrd, Trustee

HESS CORPORATION ("Lessee")

By: Randy J. Pharr, Attorney-in-Fact

STATE OF NEW MEXICO )

Output

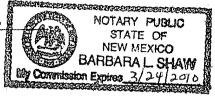
The foregoing instrument was acknowledged before me this 2/2 day of Mary K. Byrd, Trustee of JMB Trust, New Mexico, on behalf of said Trust.

Dalun J. Shaw Notary Public

otary Public

My commission expires:

Mare 24, 2010



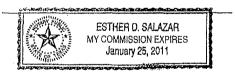
STATE OF TEXAS )

COUNTY OF HARRIS )

On this 16 th day of 12 th, 2007, before me appeared Randy J. Pharr, to me personally known, who, being by me duly sworn, did say that he is the Attorney-in-Fact of Hess Corporation, and that said instrument was signed on behalf of said corporation by authority of its Board of Directors, and said Randy J. Pharr acknowledged said instrument to be the free act and deed of said corporation.

WITNESS my hand and official seal the day and year first above written.

My commission expires:





Joaquin Martinez Project Manager Major Projects (713) 609-4087 Fax: (713) 609-5684

May 16, 2007

State of New Mexico Commissioner of Public Lands P. O. Box 1148 Santa Fe, New Mexico 87504-1148

Attention: Director of the Oil and Gas Division

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501-2088

RE: Proposed Amended Plan of Development: January 1, 2007 through December 31, 2007 West Bravo Dome Carbon Dioxide Gas Unit (WBDCDU)

Harding County, New Mexico

#### Gentlemen:

With respect to the West Bravo Dome Carbon Dioxide Gas Unit (WBDGU) and in accordance with New Mexico Oil Conservation Order Number 7707, Hess Corporation, as unit operator, hereby submits five (5) copies of the proposed Amended Plan of Development for January 1, 2007 through December 31, 2007.

Presently, there are twenty (20) shut-in carbon dioxide (CO2) gas wells in the Unit which are capable of production. Lack of available electrical power and pipeline infrastructure to gather CO2 and a sustained viable market has resulted in no CO2 gas production since unitization. The Unit originally contained 50,020.78 acres consisting of 18 Federal tracts (22,624.65 acres). The unit was contracted effective on November 15, 1994 and now contains 34,655.33 acres consisting of 15 Federal tracts (6,834.47 acres) 24 State of New Mexico tracts (13,201.18 acres) and 46 patented tracts (14,619.68).

Earlier this year Hess management authorized development of the WBDGU and a large adjacent fee lease. Specifically, Hess plans to drill 18 CO2 gas wells, 10 of which will be unit wells. Hess has negotiated to obtain a plant site for CO2 processing, surface use agreements with various surface owners to be affected by our operations, entered into a drilling contract, and

worked extensively with a private contractor toward the design of surface facilities, gathering pipelines, compression and third party electric lines and substations.

The revised Plan of Development for the remainder of 2007 will include:

• Drill 10 unit wells identified and located as follows:

1. Well name: WBDGU 1829 041 G

Location: T18N, R29E, Sec. 4; 1950' FNL, 1650' FEL

Lease Type and Name: Fee – Bessie Brown Surface Owner: Glen and Betty Lou White

2. Well Name: WBDGU 1829 161 G

Location: T18N, R29E, Sec. 16; 1900' FNL, 1700' FEL

Lease Type and Name: State – Lease # LG-4603-1

Surface Owner: JMB Trust

3. Well Name: WBDGU 1829 031 O

Location: T18N, R29E, Sec. 3; 1800' FEL, 1200' FSL

Lease Type and Name: USA - Lease # NM-27898

Surface Owner: JMB Trust

4. Well Name: WBDGU 1829 091 G

Location: T18N, R29E, Sec. 9; 2150' FNL, 1650' FEL

Lease Type and Name: Fee – Sun Exploration & Production Company

Surface Owner: JMB Trust

5. Well Name: WBDGU 1829 111 F

Location: T18N, R29E, Sec. 11; 1950' FWL, 1750' FNL

Lease Type and Name: USA - Lease # NM-63272

Surface Owner: T. E. Mitchell & Son, Inc.

6. Well Name: WBDGU 1829 051 G

Location: T18N, R29E, Sec. 5; 2100' FEL, 2100' FNL

Lease Type and Name: Fee – T. J. Stickel Surface Owner: Glen & Betty Lou White

7. Well Name: WBDGU 1829 011 G

Location: T18N, R29E, Sec. 1; 2310' FNL, 1650' FEL

Lease Type and Name: State - Lease #LG-4601

Surface Owner: T. E. Mitchell & Son, Inc.

8. Well Name: WBDGU 1829 021 H

Location: T18N, R29E, Sec. 2; 2000' FNL, 1100' FEL

Lease Type and Name: State - Lease #LG-4602-4

Surface Owner: T. E. Mitchell & Son, Inc.

9. Well Name: WBDGU 1929 321 G Location: T19N, R29E, Sec. 32; 2100' FEL, 2100' FNL Lease Type and Name: Fee – Samantha S. Galentine

Surface Owner: Glen & Betty Lou White

10. Well Name: WBDGU 1929 341 G

Location: T19N, R29E, Sec. 34; 1650' FEL, 2420' FNL

Lease Type and Name: USA - Lease #NM-19714

Surface Owner: T. E. Mitchell & Son, Inc.

- Evaluate additional drilling well locations for subsequent years
- Finalize surface use agreements with surface owners and warranty deed for acquisition of site for gas plant
- Continue work with a private contractor toward design of the production infrastructure and construct same in 2008
- Order long lead equipment
- Continue collaboration with power providers to bring low cost electricity to WBDGU
- Make unit payments which escalate at 5% yearly until the unit is in production (estimate 4<sup>th</sup> Quarter, 2008)
- Monitor and maintain existing wells in accordance with State Regulations

If there are questions regarding this proposed Amended Plan of Development for 2007, please contact me at (713) 609-4087.

Yours truly,

**HESS CORPORATION** 

✓Joaquin M. Martinez

Project Manager, West Bravo Dome Development

Cc: Mr. Brian Davis – Bureau of Land Management

## **Drilling Conditions of Approval:**

- Minimum BOPE pressure testing requirements for this well is 1000# based on the Anticipated Surface Pressure (ASP).
- Centralizers must be run on the surface casing according to Onshore order No. 2, Casing and Cementing Requirements and NTL-FRA 90-1, Requirements to Operate on Federal and Indian Leases in accordance with the following:
  - 1. For all other casing strings, an adequate number of casing centralizers (API standards) must be run through the usable water zones to ensure that the casing is centralized through these zones.
  - 2. Centralizers to impart a swirling action around the casing (turbolizers) are required just below and into the base of the lowest usable water zone.