OIL CONS. DIV.

DIST. 3

Form 3160 - 3 (April 2004)	FORM APPF OMB No. 100 Expires March	)4-0137			
UNITED STATE DEPARTMENT OF THE BUREAU OF LAND MAI	INTERIOR 2007 APR 30	AM 8:	5 - Lanca Carial No	,	•
APPLICATION FOR PERMIT TO			6. If Indian, Allotee or	Tribe Name	-
la. Type of work:	er 210-FARHIM	GTON N	If Unit or CA Agreeme	ent, Name and No.	-
lb. Type of Well: ☐ Oil Well ☐ Gas Well ✓ Other	✓ Single Zone Multip	ole Zone	8. Lease Name and Well WBDGU 1929 34		16752
2. Name of Operator Hess Corporation 495			9. API Well No. 30-021-	20414	
3a. Address P.O. Box 840 Seminole, TX 79360	3b. Phone No. (include area code) (432) 758-6738		10. Field and Pool, or Expl West Bravo Dome	•	•
4. Location of Well (Report location clearly and in accordance with a At surface 2420' FNL & 1650' FEL Sec. 34, T	•		11. Sec., T. R. M. or Blk. a Sec. 34, T19N, R2	•	-
At proposed prod. zone same			12. County or Parish	13. State	-
14. Distance in miles and direction from nearest town or post office*			Harding	NM	_
15. Distance from proposed* location to nearest property or lease line, ft.	16. No. of acres in lease	'	ng Unit dedicated to this well		
(Also to nearest drig. unit line, if any)	34,655.33	640	BIA Bond No. on file		=
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  6940'	19. Proposed Depth 2320'	62196			
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 4639'	22. Approximate date work will sta 07/02/2007	rt*	23. Estimated duration 6 days	-	-
	24. Attachments				-
The following, completed in accordance with the requirements of Onsh	ore Oil and Gas Order No.1, shall be a	ttached to th	is form:		-
<ol> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> </ol>	4. Bond to cover t Item 20 above).	he operation	ons unless covered by an exis	sting bond on file (see	!
3. A Surface Use Plan (if the location is on National Forest System SUPO shall be filed with the appropriate Forest Service Office).		specific inf	ormation and/or plans as ma	y be required by the	_
25. Signature Carol J. Moore	Name (Printed/Typed) Carol J. Moore		Da	te 04/20/2007	-
Title Sr. Advisor/Regulatory					-
Approved by (Signature) MM Miceley	Name (Printed/Typed)		Da	ite /2/17/8	- 5-7-
Title AFM	Office FEC	>			•
Application approval does not warrant or certify that the applicant ho conduct operations thereon.  Conditions of approval, if any, are attached.	lds legal or equitable title to those righ	in the sul	oject lease which would entit	le the applicant to	_
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a States any false, fictitious or fraudulent statements or representations as		willfully to 1	nake to any department or ag	gency of the United	=

\*(Instructions on page 2)

1

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".

NWOCD

SEE ATTACHED FOR CONDITIONS OF APPROVAL

DISTRICT I 1625 N. French Dr., Hobbs, NM 68240 DISTRICT II 1301 W. Grand Avenue, Artesia, NM 68210

1000 Rio Brazos Rd., Aztec, NM 87410

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

DISTRICT III

DISTRICT IV

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 Fee Lease - 3 Copies

#### OIL CONSERVATION DIVISION

1220 South St. Francis Dr.

Santa Fe, New Mexico 87505]7 APR 30 AM 8: 18

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT Pool Code ADI Namber

At I Number	1 oor code	1001	Traine.
Property Code	Prop	erty Name	Well Number
	WBDG	U 1929	341G
OGRID No.	Operator Name		Elevation
	HESS CC	RPORATION	4639'
	C - f -	T 4:	

#### Surface Location

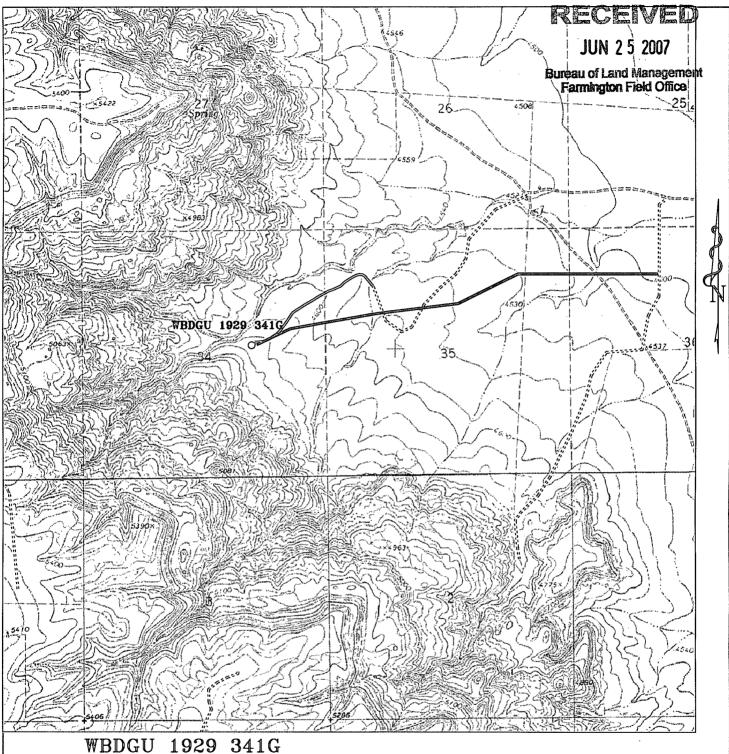
UL or lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
G	34	19 N	29 E		2420	NORTH	1650	EAST	HARDING

#### 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 Acres	Joint o	r Infill Co	nsolidation (	Code Ore	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

 <del></del>	
2420'	OPERATOR CERTIFICATION  I hereby certify that the information contained herein is true and complete to the best of my knowledge and betief, 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.
Lat - N35°50'01.3"	Carol J. Moore Sr. Advisor/Regulatory Printed Name  SURVEYOR CERTIFICATION  I hereby certify that the well location shown on this plat was plotted from field notes of
Long — W103'50'38.8" (NAD-83)	actual surveys made by me or under my supervison and that the same is true and correct to the best of my belief.  MARCH 09 2007  Date Surveyed 1. 1. 10  Signature for Seal of the surveyed Professional Surveyor 2.
	Certificate No. Gary L. Jones 7977  BASIN SURVEYS



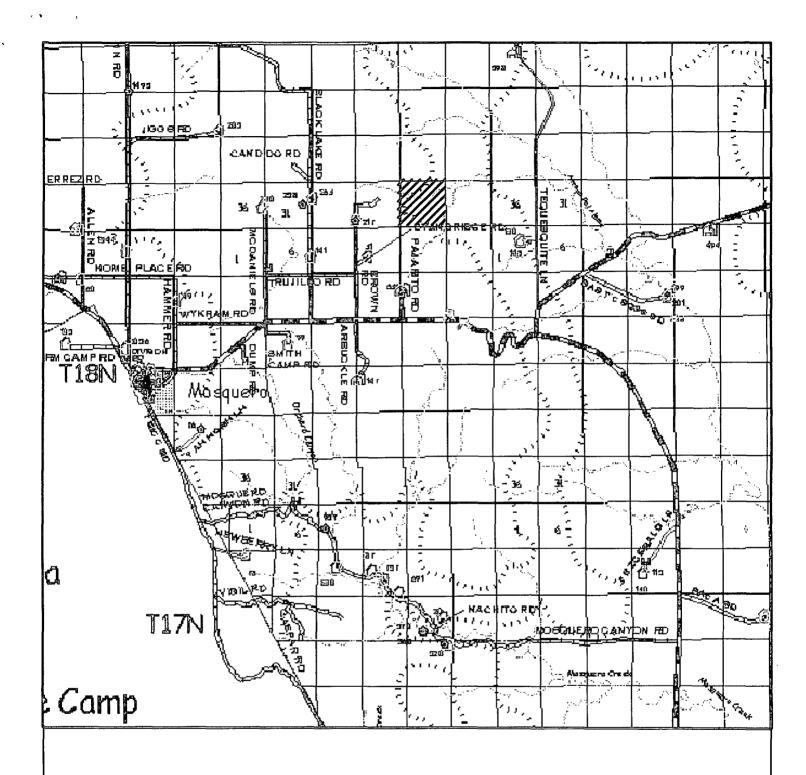
Located 2420' FNL and 1650' FEL Section 34, Township 19 North, Range 29 East, N.M.P.M., Harding County, New Mexico.



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	17805T	
Survey Date:	03-0	9-2007	
Scale: 1" = 2	5000,		
Date: 03-19	-2007		





WBDGU 1929 341G Located 2420' FNL and 1650' FEL Section 34, Township 19 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 17805TR

Survey Date: 03-09-2007

Scale: 1" = 2 MILES

Date: 03-19-2007



SECTION 34, TOWNSHIP 19 NORTH, RANGE 29 EAST, N.M.P.M., NEW MEXICO. HARDING COUNTY,

# RECEIVED

JUN 25 2007

Bureau of Land Management Farmington Field Office

150' NORTH OFF SET 4633.0 O

HESS CORPORATION WBDGU 1929 341G ELEV. - 4639 Θ

150' WEST OFF SET □ 4642.5'

Lat.-N 35°50'01.3" Long-W 103°50'38.8" (NAD-83)

> $\mathbf{O}$ 150' SOUTH OFF SET 4639.2"

PROP LSE RD

OFF SET 4634.7

150' EAST

Directions to Location:

FROM THE JUNCTION OF STATE HWY 39 AND TEQUEQUITE LN., PROCEED NORTH APPROX. 2.6 MILES TO PROPOSED LEASE ROAD.

BASIN SURVEYS P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 17805

03-19-2007

Disk: JMS 17805W

Drawn By:

J. M. SMALL

# HESS CORPORATION

WBDGU 1929 341G / WELL PAD TOPO

THE WBDGU 1929 341G LOCATED 2420' FROM THE NORTH LINE AND 1650' FROM THE EAST LINE OF SECTION 34, TOWNSHIP 19 NORTH, RANGE 29 EAST,

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

Survey Date: 03-09-2007 Sheet

Sheets

# **HESS CORPORATION**

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

# **DRILLING PLAN**

WBDGU 1929 #341G

UNIT G, SEC. 21, T19N R29E

HARDING COUNTY, NEW MEXICO

# WBDGU 1929 #341G DRILLING PLAN

#### 1. ESTIMATED FORMATION TOPS:

<u>Formation</u>	MD / TVD	<u>SSTVD</u>
Quaternary Alluvium	0'	+4368'
Permian San Andres	1220'	+3145'
Permian Yeso	1700'	+2700'
Permian Cimarron Anhydrite	1920'	+2448'
Permian Tubb Sand	2062'	+2578'
Precambrian Granite	2270'	+2370'

# 2. ESTIMATED DEPTH OF GROUND WATER:

Ground water is estimated to be between 40' and 75'. Surface casing will be 8 5/8", 24#, run to a depth of 750' 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 308 sx cement Tail 72 sx cement

Production casing:

Lead 133 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 2,300' 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 ≥2 MMCFPD. The proposed well will encounter the Tubb Sandstone at a depth of 2,062' MD (+2,578' SS).

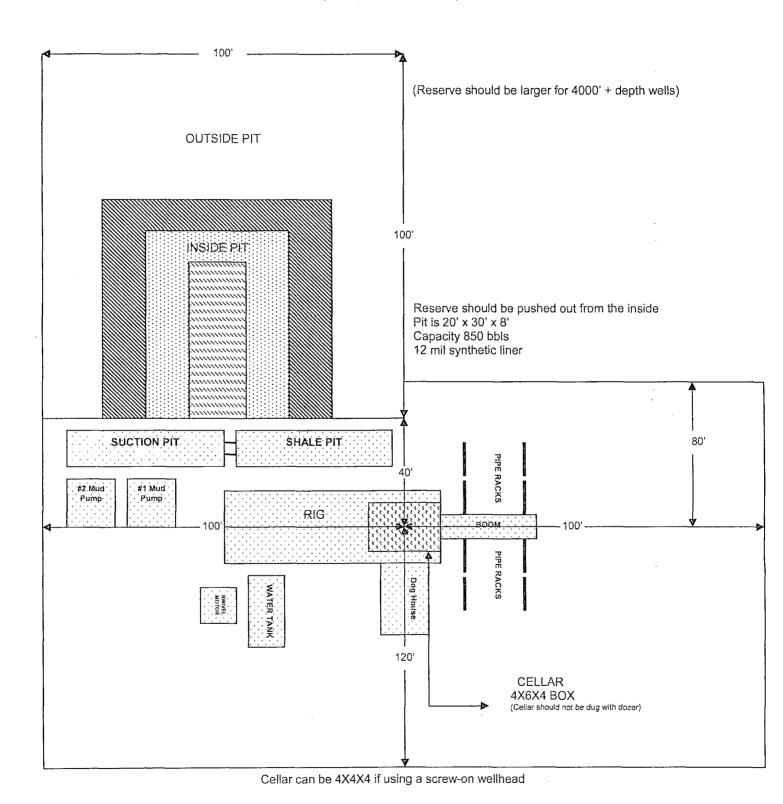
# **COMPLETION PROCEDURE:**

- 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)





# 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 031O, 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 V 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 1929 #341G UNIT G, SEC. 34, T19N 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. Existing road will be graded to a width of 20'. Natural drainage will be utilized with no bridges or culverts required.
- 3. LOCATION OF EXISTING WELLS: None within 1 mile radius
- 4. FACILITIES: Please see attached map.
- 5. <u>LOCATION OF WATER SUPPLY:</u> Mitchell pond water will be trucked from Sec. 35, T19N, 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. <u>WELL SITE LAYOUT:</u> Please see attached layout, plat, and diagram.
- 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.
- 11. SURFACE OWNERSHIP:

Terry Mitchell

690 Tequesquite Ln. Mosquero, NM 87733

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

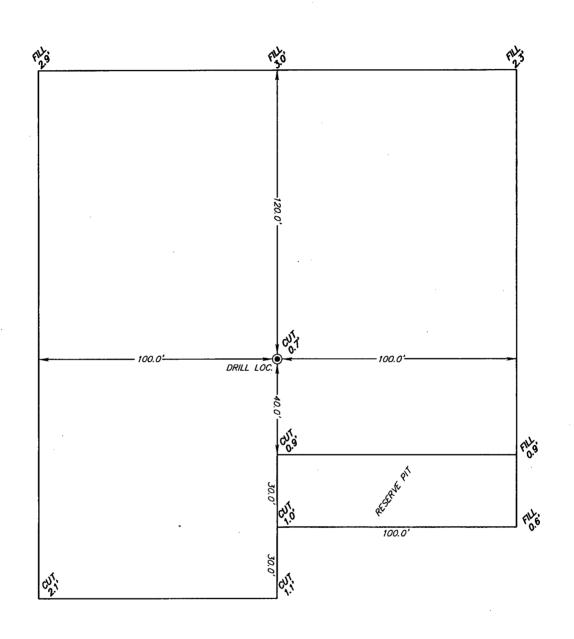
I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated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

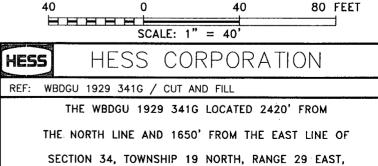
Name and Title:

Carol J. Moore

Sr. Advisor/Regulatory

SECTION 34, TOWNSHIP 19 NORTH, RANGE 29 EAST, N.M.P.M., HARDING COUNTY, NEW MEXICO.





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

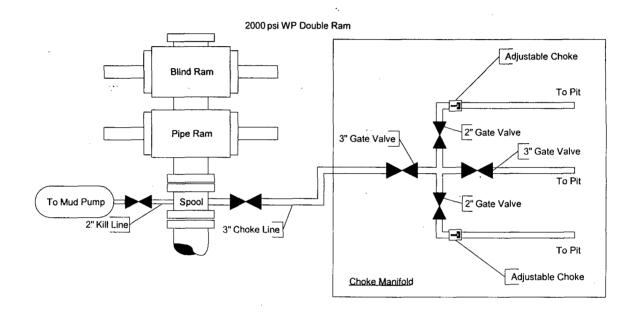
BASIN SURVEYS P.O. BOX 1786 - HOBBS, NEW MEXICO

W.O. Number: 17805 Drawn By: J. M. SMALL

Date: 03-19-2007 Disk: JMS 17805CF Survey Date: 03-09-2007 Sheet 1 of 1 Sheets

WBDGU 1829 031O, 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 1929 #341G DRILLING PLAN

## 1. ESTIMATED FORMATION TOPS:

<u>Formation</u>	MD / TVD	SSTVD
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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 250 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 100 sx cmnt Midcon2 P Plus @ YLD-2.93 CFS & 11.4 ppg
Tail 350 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.

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

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# **COMPLETION PROCEDURE:**

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- 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 March 1, 1990 (hereinafter referred to as "this Agreement"). The parties are T. E. Mitchell & Son, Inc., ("Mitchell") a New Mexico corporation, and Amerada Hess Corporation ("AHC"), a Delaware corporation.

#### BACKGROUND

AHC is now leasing from Mitchell approximately 64,461 acres of land situated in Harding County, New Mexico, within the boundaries of the Mitchell Ranch, the "Mitchell Ranch" for purposes of this Agreement being defined to include all lands owned or leased by Mitchell pursuant to the Amended and Restated Carbon Dioxide and Oil and Gas Lease Agreement dated March 1, 1990 ("the Lease") between Mitchell and AHC, and any other Mitchell Ranch lands either now or hereafter owned or leased by Mitchell. The Lease is for the purpose of developing, marketing and transporting carbon dioxide from the premises covered by the Lease.

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:

I.

Subject to the terms and conditions set forth below in Paragraph VI, and in consideration of the mutual covenants set forth below, Mitchell grants to AHC the right and privilege to use existing roads and to construct, as

necessary, new roads on the Mitchell Ranch to allow AHC, 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 all lands in Mitchell Ranch 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 Lease.

II.

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

III.

Mitchell will use its good faith efforts to contract on a deal-by-deal basis for the sale by Mitchell to AHC of water situated on or under the Mitchell Ranch from existing wells, ponds and tanks, and hereby grants the right to use the Mitchell Ranch to drill additional wells and to construct additional tanks and ponds to provide water for normal lease operations, it being understood that Mitchell shall be under no obligation to attempt to negotiate with AHC for the sale of water from existing source, if, in Mitchell's discretion, Mitchell believes that such would interfere with Mitchell's operations on the Mitchell Ranch. AHC recognizes that water is a very limited resource and AHC shall use only those volumes of water which are necessary for its operations.

Unless Mitchell otherwise hereafter agrees in writing, AHC with respect to all operations within the confines of the Mitchell Ranch, shall:

- (a) When requested by Mitchell, 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 1/2 mile of the Mitchell Ranch headquarters, except in the drilling, completion and production of wells drilled within such 1/2 mile distance.
- (c) Use no chemical or apply no manufactured chemical substances on roads, drill sites and rights-of-way.
- (d) Pay Mitchell actual damages to improvements situated on the Mitchell Ranch and personal property situated on the Mitchell Ranch that may be caused by operations conducted by or for AHC.
- (e) Utilize lands having a width of no more than 50 feet at any time or point for pipelines across the Mitchell Ranch; and for ingress thereto or egress therefrom to use only existing roads and the pipeline right-of-way itself.
- (f) In carrying on any operations on the Mitchell Ranch, 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 AHC; and fence out all drilling, slush or other pits which AHC 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 the Mitchell Ranch. After each well is completed, the well will be fenced by AHC with fencing adequate to turn livestock.
- (g) As soon as feasible: remove all plastic pit liners; 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 the Mitchell Ranch 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.
- (j) Keep all creek and gully crossings traversed by AHC both graded and passable.
- (k) Place single lane cattleguards, set in concrete, at all fence crossings, and in doing so, set a cattleguard 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 cattleguard site before cutting the fence to install the cattleguard; and thereafter keep such cattleguards cleaned out at all times to prevent passage of livestock thereover. With respect to all cattleguards used by AHC, AHC shall install, when requested by Mitchell, a swinging arm approximately three feet above the surface which can be locked or otherwise secured. At each cattleguard location, a conventional 14' wide cattle gate will be installed abutting the cattleguard.
- (1) In all work, construction and maintenance activities on the Mitchell Ranch, prevent soil washing and erosion and promptly repair such as may occur.
- (m) Permit no firearms on the Mitchell Ranch; permit no discharging of firearms; and permit no hunting thereon by AHC or any of its invitees.
- (n) Promptly pick up and remove all trash introduced onto the Mitchell Ranch by AHC or its invitees.
- (o) Permit no consumption of alcoholic beverages on the Mitchell Ranch by AHC or its invitees.
- (p) Permit no fires on the Mitchell Ranch.
- (q) Forthwith close and secure all gates opened by AHC 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 Mitchell as such.
- (t) Maintain and enforce a speed limit for all vehicles on the Mitchell Ranch for vehicles of AHC 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 Mitchell, equip cattleguards at public roads with gates that can be locked.
- (w) Upon termination of the purposes of this Lease, AHC shall leave cased and in good condition for use by Mitchell such water wells as AHC may be authorized to drill on the Mitchell Ranch.
- (x) Use no part of the Mitchell Ranch other than the Plant Facility Site to store machinery, equipment, pipe or other property while it is not being used; and use no part of the Mitchell Ranch 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 Lease has terminated, either in whole or in part, remove all machinery, equipment and fixtures placed on the land as to which the Lease has terminated, and within 180 days after a pipeline or a flow line placed on the Mitchell Ranch shall cease to be connected to a producing well, remove such as have not been buried below ordinary plow depth, if requested by Mitchell.

٧.

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

- (a) For each well hereafter drilled by AHC within the confines of the Mitchell Ranch an amount equal to \$1,000.00 per well location. An amount equal to \$600 for each mile of new road (which is not pipeline right-of-way) required to be constructed by AHC 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 the Mitchell Ranch, the sum of \$6.17 per linear rod of pipeline, if such pipeline shall have a diameter of four inches or less; \$8.64 per linear rod if such pipeline shall have a diameter greater than four inches or up to and including eight inches; and one dollar per inch in diameter per linear rod for all pipeline having a diameter in excess of eight inches, to be paid before work commences. Above payments shall cover both the right-of-way, AHC's reseeding obligation, and surface damages.

- (c) The sum of 75 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 Mitchell properties. 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 every five year anniversary of this Agreement 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: Mitchell through the Lease and this Agreement hereby grants to AHC the following rights with respect to Mitchell owned lands within the confines of the Mitchell Ranch, whether or not such acreage is under lease to AHC, to which such rights are reasonably necessary for the development and operation of the leased premises for the purposes of the Lease:

- (a) Roadways. The right to construct and maintain roadways; provided, however, AHC will utilize existing roadways over and across the Mitchell Ranch before constructing additional new roadways, wherever practicable; will construct new and maintain existing roads on Mitchell lands used by AHC 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 Mitchell is obtained.
- (b) Pipelines. The right to construct and maintain pipelines.
- (c) <u>Power Lines.</u> The right to construct and maintain power lines over and across the Mitchell Ranch to three locations in addition to those which now exist; provided, however, in the event that power lines in

addition to those now existing and the three additional provided for hereinabove are deemed necessary by Lessee, the same shall be either buried, or located pursuant to a mutual agreement between Lessee and Mitchell.

- (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 Mitchell and AHC. With regard to the items set forth in subparagraphs (a) through (d) hereinabove, it is understood between the parties that Mitchell has an interest in the location and construction of these items which will be located on the Mitchell Ranch. 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 the Mitchell Ranch and which is practicable for the purposes of AHC under the Lease.

VII.

AHC shall not, either directly or indirectly, compete with Mitchell to acquire grazing leases within the confines of the Mitchell Ranch.

#### VIII.

The rights and duties of AHC under this Agreement are appurtenant to the Lease and shall be binding upon and shall inure to the benefit of AHC and its successors and to its assignees of the Lease or parts thereof. An assignment of the Lease by AHC, either in whole or in part, shall, to the extent of the assignment of the Lease relieve and discharge AHC 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 AHC with respect to the property assigned. This Agreement shall be binding upon and shall inure to the benefit of Mitchell, its successors and assigns.

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

T. E. MITCHELL & SON, INC.
 ("Lessor")

: Temp & M

Terry R. Mi President

ATTEST:

Don W. Cox Assistant Secretary AMERADA HESS CORPORATION

("Lessee")

By:

Senior Vice-President

STATE OF NEW MEXICO ) SS:

The foregoing instrument was acknowledged before me this 29th day of \_\_\_\_\_\_\_\_, 1990, by TERRY R. MITCHELL, President of T. E. Mitchell & Son, Inc., a New Mexico corporation, on behalf of said corporation.

Verginia Meadows
Notary Public

My commission expires:

July 8, 1992

STATE OF OKLAHOMA )
COUNTY OF TULSA )

On this <u>26th</u> day of March, 1990, before me appeared M. B. BIANCHI, to me personally known, who, being by me duly sworn, did say that he is the Senior Vice-President of AMERADA HESS CORPORATION, and that the seal affixed to said instrument is the corporate seal of said corporation, and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and said M. B. BIANCHI acknowledged said instrument to be the free act and deed of said corporation.

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

Patricia Lynn Wells Notary Public

My commission expires:

MY COMMISSION EXPIRES
JANUARY 11,1993



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

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

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

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.

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.