



APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

RECEIVED

JUL 11 2002

MO Oil & Gas Council

<input checked="" type="checkbox"/> APPLICATION TO DRILL		<input type="checkbox"/> DEEPEN	<input type="checkbox"/> PLUG BACK	<input type="checkbox"/> FOR AN OIL WELL	<input checked="" type="checkbox"/> OR GAS WELL		
NAME OF COMPANY OR OPERATOR Dorado Gas Resources, LLC				DATE 7-8-02			
ADDRESS 1100 Conrad Industrial Drive		CITY Ludington		STATE Michigan	ZIP CODE 49431		
DESCRIPTION OF WELL AND LEASE							
NAME OF LEASE G. Hales		WELL NUMBER 13-31		ELEVATION (GROUND) 1032.76			
WELL LOCATION (GIVE FOOTAGE FROM SECTION LINES) _____ 858 _____ FT. FROM (N) (S) SECTION LINE _____ 626 _____ FT. FROM (E) (W) SECTION LINE							
WELL LOCATION SW SW	SECTION 31	TOWNSHIP 56N	RANGE 31W	LATITUDE 39°37'06"N	LONGITUDE 94°25'50"W	COUNTY Clinton	
NEAREST DISTANCE FROM PROPOSED LOCATION TO PROPERTY OR LEASE LINE <u>Approx. 250</u> FEET							
DISTANCE FROM PROPOSED LOCATION TO NEAREST DRILLING, COMPLETED OR APPLIED - FOR WELL ON THE SAME LEASE <u>N/A</u> FEET							
PROPOSED DEPTH 1,450'	DRILLING CONTRACTOR, NAME AND ADDRESS McGown-Thompson, Inc. P.O. Box 299, Mound City, KS 66056		ROTARY OR CABLE TOOLS Rotary	APPROX. DATE WORK WILL START Estimated w/I 120 days of Issuance			
NUMBER OF ACRES IN LEASE 264.5	NUMBER OF WELLS ON LEASE, INCLUDING THIS WELL, COMPLETED IN OR DRILLING TO THIS RESERVOIR <u>1</u>		NUMBER OF ABANDONED WELLS ON LEASE <u>0</u>				
IF LEASE PURCHASED WITH ONE OR MORE WELLS DRILLED, FROM WHOM PURCHASED? NAME <u>New lease from land owner</u> ADDRESS _____				NO. OF WELLS: PRODUCING <u>0</u> INJECTION <u>0</u> INACTIVE <u>0</u> ABANDONED <u>0</u>			
STATUS OF BOND		<input checked="" type="checkbox"/> SINGLE WELL AMOUNT \$ <u>3,000.00</u>		<input type="checkbox"/> BLANKET BOND AMOUNT \$ _____		<input type="checkbox"/> ON FILE <input checked="" type="checkbox"/> ATTACHED	
REMARKS: (IF THIS IS AN APPLICATION TO DEEPEN OR PLUG BACK, BRIEFLY DESCRIBE WORK TO BE DONE, GIVING PRESENT PRODUCING/INJECTION ZONE AND EXPECTED NEW INJECTION ZONE; USE BACK OF FORM IF NEEDED.)							
PROPOSED CASING PROGRAM				APPROVED CASING - TO BE FILLED IN BY STATE GEOLOGIST			
AMOUNT	SIZE	WT/FT	CEM.	AMOUNT	SIZE	WT/FT	CEM.
145'	9 5/8"	32.3 lbs.	145'-surface	145'	9 5/8"	32.3 lb	145'-surface
1,450'	7"	17 lbs.	1,450'-surface	1450'	7"	17 lb	1450'-surface
I, the undersigned, state that I am the <u>Permit coordinator</u> of the <u>Dorado Gas Resources, LLC</u> (company), and that I am authorized by said company to make this report, and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct, and complete to the best of my knowledge.							
SIGNATURE <u>Brian A Benson</u>				DATE 7-8-02			
PERMIT NUMBER <u>20018</u>		APPROVED DATE <u>7-11-02</u>		APPROVED BY <u>[Signature]</u>			
<input checked="" type="checkbox"/> DRILLER'S LOG REQUIRED		<input checked="" type="checkbox"/> CORE ANALYSIS REQUIRED IF RUN		<input checked="" type="checkbox"/> E-LOGS REQUIRED IF RUN			
<input type="checkbox"/> SAMPLES REQUIRED		<input checked="" type="checkbox"/> SAMPLES NOT REQUIRED		<input checked="" type="checkbox"/> DRILL SYSTEM TEST INFO. REQUIRED IF RUN			
<input type="checkbox"/> WATER SAMPLES REQUIRED AT							
NOTE - THIS PERMIT NOT TRANSFERABLE TO ANY OTHER PERSON OR TO ANY OTHER LOCATION.							
APPROVAL OF THIS PERMIT BY THE OIL AND GAS COUNCIL DOES NOT CONSTITUTE ENDORSEMENT OF THE GEOLOGIC MERITS OF THE PROPOSED WELL NOR ENDORSEMENT OF THE QUALIFICATIONS OF THE PERMITTEE.							
I _____ of the _____ Company confirm that an approved drilling permit has been obtained by the owner of this well. Council approval of this permit will be shown on this form by presence of a permit number and signature of authorized council representative.							
DRILLER'S SIGNATURE					DATE		



WELL COMPLETION OR RECOMPLETION REPORT AND WELL LOG

NEW WELL WORKOVER DEEPEN PLUG BACK INJECTION SAME RESERVOIR DIFFERENT RESERVOIR OIL GAS DRY

OWNER: **Dorado Gas Resources LLC** ADDRESS: **1100 Conrad Industrial Dr., Ludington, MI 49431**

LEASE NAME: **G. Hales** WELL NUMBER: **13-31**

LOCATION OF WELL SEC. - TWP. - RNG. OR BLOCK AND SURVEY: **Sw Sw Section 31, T56N R31W** LATITUDE: **39 37' 06" N** LONGITUDE: **94 25' 50" W**

COUNTY: **Clinton** PERMIT NUMBER (OGC-3 OR OGC-3I): **20007**

DATE SPUDDED: **July 29, 2002** DATE TOTAL DEPTH REACHED: **Aug 9, 2002** DATE COMPLETED READY TO PRODUCE OR INJECT: **10/8/02** ELEVATION (DF, RKR, RT, OR Gr.) FEET: **1009 KB** ELEVATION OF CASING HD. FLANGE: **1006** FEET

TOTAL DEPTH: **1110** PLUG BACK TOTAL DEPTH: **1072**

PRODUCING OR INJECTION INTERVAL(S) FOR THIS COMPLETION: **Iron Post, Bevier, Mineral, Tebo and Tebo B coals** ROTARY TOOLS USED (INTERVAL): **1110** CABLE TOOLS USED (INTERVAL): **N/A**
DRILLING FLUID USED: **native bentonite gel**

WAS THIS WELL DIRECTIONALLY DRILLED? **No** WAS DIRECTIONAL SURVEY MADE? **N/A** WAS COPY OF DIRECTIONAL SURVEY FILED? **N/A** DATE FILED: **N/A**

TYPE OF ELECTRICAL OR OTHER LOGS RUN (LIST LOGS FILED WITH THE STATE GEOLOGIST): **Dual Porosity, Microresistivity, Dual Induction** DATE FILED: **With this form**

CASING RECORD

CASING (REPORT ALL STRINGS SET IN WELL - CONDUCTOR, SURFACE, INTERMEDIATE, PRODUCING, ETC.)

PURPOSE	SIZE HOLE DRILLED	SIZE CASING SET	WEIGHT (LB. FT)	DEPTH SET	SACKS CEMENT	AMOUNT PULLED
Surface	12.25	9 5/8	32.3	82	63	0
Production	8.75	7"	17	258	258	0

TUBING RECORD

LINER RECORD

SIZE	DEPTH SET	PACKER SET AT	SIZE	TOP	BOTTOM	SACKS CEMENT	SCREEN
2 7/8 IN.	811.79 FEET	None FEET	None INCH	N/A FEET	N/A FEET	N/A	N/A FEET

PERFORATION RECORD

ACID, SHOT, FRACTURE, CEMENT SQUEEZE RECORD

NUMBER PER FOOT	SIZE AND TYPE	DEPTH INTERVAL	AMOUNT AND KIND OF MATERIAL USED	DEPTH INTERVAL
4	34 gram charges	662-667	5000 lbs sand, 303 bbls water	662-667
4	34 gram charges	689-693	5000 lbs sand, 290 bbls water	689-693
4	34 gram charges	718-722	5000 lbs sand, 280 bbls water	718-722
4	34 gram charges	757-762	5100 lbs sand, 306 bbls water	757-762

INITIAL PRODUCTION

DATE OF FIRST PRODUCTION OR INJECTION: **10/09/02** PRODUCING METHOD (INDICATE IF FLOWING, GAS LIFT, OR PUMPING - IF PUMPING, SHOW SIZE AND TYPE OF PUMP): **Pumping**

DATE OF TEST: **N/A** HOURS TESTED: **N/A** CHOKE SIZE: **N/A** OIL PRODUCED DURING TEST: **N/A** bbbls. GAS PRODUCED DURING TEST: **N/A** MCF WATER PRODUCED DURING TEST: **N/A** bbbls. OIL GRAVITY: **N/A** API (CORR.)

TUBING PRESSURE: **50** CASING PRESSURE: **10** CALCD RATE OF PRODUCTION PER 24 HOURS: **N/A** OIL: **0** bbbls. GAS: **0** MCF WATER: **34** bbbls. GAS OIL RATIO: **N/A**

DISPOSITION OF GAS (STATE WHETHER VENTED, USED FOR FUEL OR SOLD): **Venting - coal bed methane pilot well**

METHOD OF DISPOSAL OF MUD PIT CONTENTS: **Evaporation**

CERTIFICATE: I, THE UNDERSIGNED, STATE THAT I AM THE **Manager** OF THE **Dorado Gas Resources LLC** COMPANY, AND THAT I AM AUTHORIZED BY SAID COMPANY TO MAKE THIS REPORT, AND THAT THIS REPORT WAS PREPARED UNDER MY SUPERVISION AND DIRECTION AND THAT THE FACTS STATED THEREIN ARE TRUE, CORRECT AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DATE: **2/04/03** SIGNATURE:

INSTRUCTIONS: ATTACH DRILLERS LOG OR OTHER ACCEPTABLE LOG OF WELL.

*** SHOW ALL IMPORTANT ZONES OF POROSITY, DETAIL OF ALL CORES, AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES.**

DETAIL OF FORMATIONS PENETRATED

FORMATION	TOP	BOTTOM	DESCRIPTION (SEE * ABOVE)
Pleasanton	416	482	No DSTs
Marmaton	482	627	No Cores
Cherokee	627	1060	
V-Shale	729	731	
Tebo B	794	796	
Mississippian	1060	N/A	

MAY 14 2008

FORM OGC-7



**STATE OF MISSOURI
MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM
PLUGGING RECORD**

Mo Oil & Gas Council

OWNER'S NAME Rosetta Resources Inc (Calpine)		ADDRESS 1200 17th St., Suite 770, Denver, CO 80202		
NAME OF LEASE G. Hales		WELL NUMBER 13-31	PERMIT NUMBER (OGC-3 OR OGC-31 NUMBER) 20018	
LOCATION OF WELL SEC TWN RNG OR BLOCK AND SURVEY Sec. 31 Township 56 North Range 31 <input type="checkbox"/> East <input checked="" type="checkbox"/> West		LATITUDE 39 37 06	LONGITUDE 94 25 50	COUNTY Clinton
APPLICATION TO DRILL THIS WELL WAS FILED IN NAME OF: Calpine Natural Gas (Dorado Gas)	HAS THIS WELL EVER PRODUCED OIL OR GAS? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	CHARACTER OF WELL AT COMPLETION (INITIAL PRODUCTION) OIL (BBL/DAY) _____ GAS (MCF/DAY) _____		DRY? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
DATE OF ABANDONMENT 8/29/2007	TOTAL DEPTH 1150	AMOUNT WELL PRODUCING PRIOR TO ABANDONMENT OIL (BBL/DAY) _____ GAS (MCF/DAY) _____		WATER (BBL/DAY) 0

Name of each formation containing oil or gas. Indicate which formation open to well bore at time of abandonment	Fluid content of each formation	Depth interval of each formation	Size, kind, and depth of plugs used, giving amount of cement.
Iron Post	na	662-693	150ft cmt plug 733-583-35sx60/40Poz
Mineral	na	718-762	(above)
			218ft cmt plug 218-surf-45sx60/40Pz

SIZE PIPE	PUT IN WELL (FT)	PULLED OUT (FT)	LEFT IN WELL (FT)	GIVE DEPTH AND METHOD OF PARTING CASING (SHOT, RIPPED, ETC.)	PACKERS AND SHOES
9.625	125	0	125	left in hole	none
7.000	1143	0	1143	left in hole	none

WAS WELL FILLED WITH MUD-LADEN FLUID? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	INDICATE DEEPEST FORMATION CONTAINING FRESH WATER na
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NAME AND ADDRESSES OF ADJACENT LEASE OPERATORS OR OWNERS OF THE SURFACE		
NAME	ADDRESS	DIRECTION FROM THIS WELL
Hale	Plattsburg, MO	

METHOD OF DISPOSAL OF MUD PIT CONTENTS burial

NOTE FILE THIS FORM IN DUPLICATE WITH: (USE REVERSE SIDE FOR ADDITIONAL DETAIL)
API# 049-20018

CERTIFICATE I, the undersigned, state that I am the Consultant of the Rosetta Resources, Inc. (Company), and that I am authorized by said company to make this report; and that this report was prepared under my supervision and direction and that the facts stated therein are true, correct and complete to the best of my knowledge.

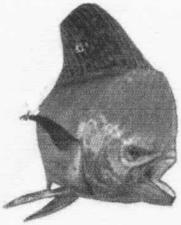
SIGNATURE Steven R Hash	DATE 5/12/2008
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DETAIL OF FORMATIONS PENETRATED

FORMATION	TOP	BOTTOM	DESCRIPTION (SEE * BELOW)
			<p>RECEIVED</p> <p>MAY 14 2008</p> <p>Mo Oil & Gas Council</p>

NOTE	* Show all important zones of porosity, detail of all cores, and all drill-stem tests, including depth interval tested, cushion used, time tool open flowing and shut-in pressures, and recoveries.
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INSTRUCTIONS	Attach drillers log or other acceptable log of well if available. This Well Completion or Recompletion report and well log shall be filed with the Missouri State Geologist not later than 30 days after project completion.
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Dorado Gas Resources LLC

Finding Clean Energy for America's Future

February 4, 2003

Mr. Matthew Parker
Geological Survey Program 49-20018
Wellhead Protection Section
P.O. Box 250
Rolla, MO 65402

SENT EXPRESS MAIL

RE: G. Hales #13-31 Permit No. 20007

Dear Mr. Parker:

Please find enclosed the OGC-5 form, a set of well logs and a geologic\mud log for the above captioned well. We are requesting a *one year confidentiality* status on all data pertaining to the above captioned well.

Please do not hesitate to call me if you have any questions or need more information.
Thank you.

Sincerely,

Steven A. Tedesco

SAT/kwt

Enclosures



CALPINE

CALPINE NATURAL GAS COMPANY

TABOR CENTER

1200 17th STREET, SUITE 770

DENVER, COLORADO 80202

720.359.9144

720.359.9140 (FAX)

January 20, 2003

Missouri Oil and Gas Council
Attn: Matt Parker
P.O. Box 250
Rolla, Missouri 65402

R E C E I V E D

JAN 23 2003

MO Oil & Gas Council

RE: Bonding and Change of Operator
Calpine Natural Gas L.P.

Dear Mr. Parker:

Calpine Natural Gas. L.P. wishes to assume operation of the following wells:

**R. Norton Trust #11-31
NESW Sec. 31-T56N-R31W
Clinton County, MO
Permit No. 20006**

**G. Hales #13-31
SWSW Sec. 31-T56N-R31W
Clinton County, MO
Permit No. 20007**

Pursuant to the Missouri Oil and Gas Council bonding requirements, enclosed for your further handling are the following documents:

- \$6,000.00 Certificate of Deposit Receipt
(issued by Bank One)
- Organization Report (Form OCG-1)
- Personal Bond – Secured by a Certificate of
Deposit (Form OGC-2A)

Should you have questions or require additional information, please feel free to contact me at 720/946-1316.

Sincerely,

Leslie Kinsley
Landman

EXACT Engineering, Inc.

20 E 5th St., Suite 310, Tulsa, OK 74103

www.exactengineering.com

(918) 599-9400 • (918) 599-9401 (fax)

Steven R. Hash, P.E.
Registered Professional Engineer
stevehash@exactengineering.com

May 12, 2008

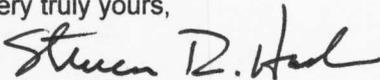
✓ Mr. Jeff Jaques
Missouri Oil & Gas Council
Department of Geology and Land
Rolla, MO 65402

Re: Plugging record OGC-7
Hales 13-31 well
Sec 31 T56N R31W
Clinton County, MO

Dear Mr. Jaques,

After reviewing our records we discovered that the plugging record for the subject well was not previously submitted. On behalf of the Operator, Rosetta Resources, Inc., please find enclosed two signed copies of form OGC-7, Plugging Record. This well was abandoned on August 29, 2007 in accordance with the plugging plan as submitted to your office on August 3, 2007 and subsequently approved. Site restoration has been completed.

Very truly yours,



Steven R. Hash

Enclosures

Xc: Rosetta Resources, Inc.
1200 17th St., Suite 770
Denver, CO 80202

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MAY 14 2008

Mo Oil & Gas Council



NOV 18 2002

Finding Clean Energy for America's Future

November 13, 2002

Mr. Evan A. Kifer
Department of Natural Resources
P.O. Box 250
111 Fairgrounds Road
Rolla, MO 65402-0250

RE: Release of Drilling Permits and CD's

Dear Mr. Kifer:

In July of 2002, Dorado Gas Resources, LLC permitted five (5) shallow gas wells and a salt water disposal well in Township 56 North, Range 31 West in Section 31. During July, Dorado Gas Resources drilled the G. Hales 13-31 permit number 20018 and the Norton #11-31 permit number 20017. At this time we have no further plans to drill the remaining four (3) wells and the salt water disposal well. I am requesting the release of the following four (3) drilling permits, the SWD drilling permit and the associated certificates of deposit. Please find the permit numbers we wish to release:

<u>Lease/well #</u>	<u>Permit #</u>	<u>CD #</u>	<u>CD Amount</u>
B. Shoemaker 7-31	Permit #20015	76292	\$3,000.00
R. Norton 5-31	Permit #20016	76291	\$3,000.00
D. Norton 15-31	Permit #20019	76293	\$3,000.00
R. Norton 11-31 SWD	Permit #20020	76289	\$4,000.00

Please let me know if any further information is required to release these Permits and sign off on the signature cards for each of the Certificates of Deposit's. Thank you for your cooperation and continued assistance; it has been a pleasure working with you during the last six months.

Dorado Gas Resources, LLC

John K. Wilson
Manager/Member

RECEIVED

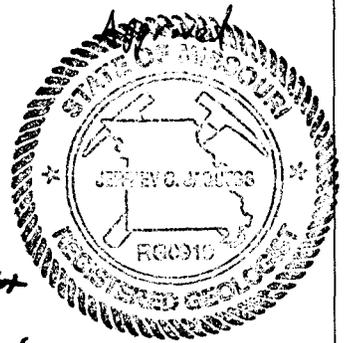
FORM OGC-6



MISSOURI DEPARTMENT OF NATURAL RESOURCES
 MISSOURI OIL AND GAS COUNCIL
 NOTICE OF INTENTION TO ABANDON WELL

AUG 13 2007

NAME OF LEASE G. HALES		Mo Oil & Gas Council		DATE 8/3/07
WELL NUMBER 13-31	LOCATION 858 FEET FROM (N) SECTION LINE AND 626 FEET FROM (W) SECTION LINE OF			
SECTION 31	TOWNSHIP 56 N	RANGE 31 W	COUNTY CLINTON	
THE ELEVATION OF THE GROUND AT WELL SITE IS 1033 FEET ABOVE SEA LEVEL.		PERMIT NUMBER (OGC-3 OR OGC-31 NUMBER) 049-20018		
NAME OF CONTRACTOR OR COMPANY THAT WILL DO WORK IS: CONSOLIDATED OIL WELL SERVICES (CEMENTER)				
ADDRESS 211 W. 4th		CITY CHANUTE	STATE KS	ZIP CODE 66720
DETAILS OF WORK (INDICATE SIZE, KIND, AND DEPTH OF PLUGS, WHERE CASING WILL BE PULLED, OTHER PERTINENT DETAILS) 9 5/8" csq set @ 125' & cut'd to surface 7" csq set @ 1143' & cut'd to surface perfs 694'-966' Proposed plugging plan: plug cement plug 150' from 744' to 594' = 30 st plug cement plug 200' from 200' to surface = 40 st cut off csqs 3' BBL + weld on cover with name + date No casing will be pulled from well Hole will be filled with mud prior to cementing Operator: CALPINE NATURAL GAS Co. (now Rosetta Resources) 1200 17th St, Ste 770 Denver, CO 80202 Attn: Mr. Robert Richardson (720) 946-1315				
CERTIFICATE: I, the undersigned, state that I am the <u>President</u> of the <u>EXACT Engineering Inc.</u> (company), and that I am authorized to make this report; and that this report was prepared under my supervision and direction and that the facts stated herein are true, correct, and complete to the best of my knowledge.				
SIGNATURE Steven D. Heel (418) 599-9400			DATE 8/3/07	



EXACT Engineering, Inc.

www.exactengineering.com

415 S. Boston Ave., Suite 734, Tulsa, OK 74103 • (918) 599-9400 • (918) 599-9401 (fax)

Steven R. Hash, P.E.
Registered Professional Engineer
stevehash@exactengineering.com

RECEIVED

AUG 13 2007

Mo Oil & Gas Council

August 3, 2007

Mr. Evan Kifer
Missouri Oil & Gas Council
Department of Geology and Land
P.O. Box 250
Rolla, MO 65402

Re: Notice of Intention to Abandon Well(s)
1. G. Hales # 13-31, Sec 31 T56N R31W, Clinton County, MO
2. Norton 11-31R, Sec 31 T56N R31W, Clinton County, MO

Dear Mr. Kifer,

Please find enclosed forms OGC-6 evidencing our intention to plug and abandon the referenced wells. The wells were drilled and operated by Calpine Natural gas Company which is now Rosetta Resources of Denver, CO.

EXACT Engineering, Inc. will provide engineering and site supervision services for Calpine (Rosetta). We are prepared to begin operations during the week of August 13-17, 2007 contingent on your release to commence operations.

Please advise if there are any further requirements or conditions of approval. Thank you for your cooperation.

Very Truly Yours,



Steven R. Hash, P.E.

Enclosures

xc via email: Mr. Robert Richardson
ROSETTA RESOURCES
1200 17th St, Suite 770
Denver, CO 80202
(720) 946-1315

Petroleum Engineering Consulting, Personnel & Jobsite Supervision
complete well design, construction & management, drilling, completion, production, pipelines, appraisals,
due diligence, acquisitions, procedures, temporary personnel and field supervision

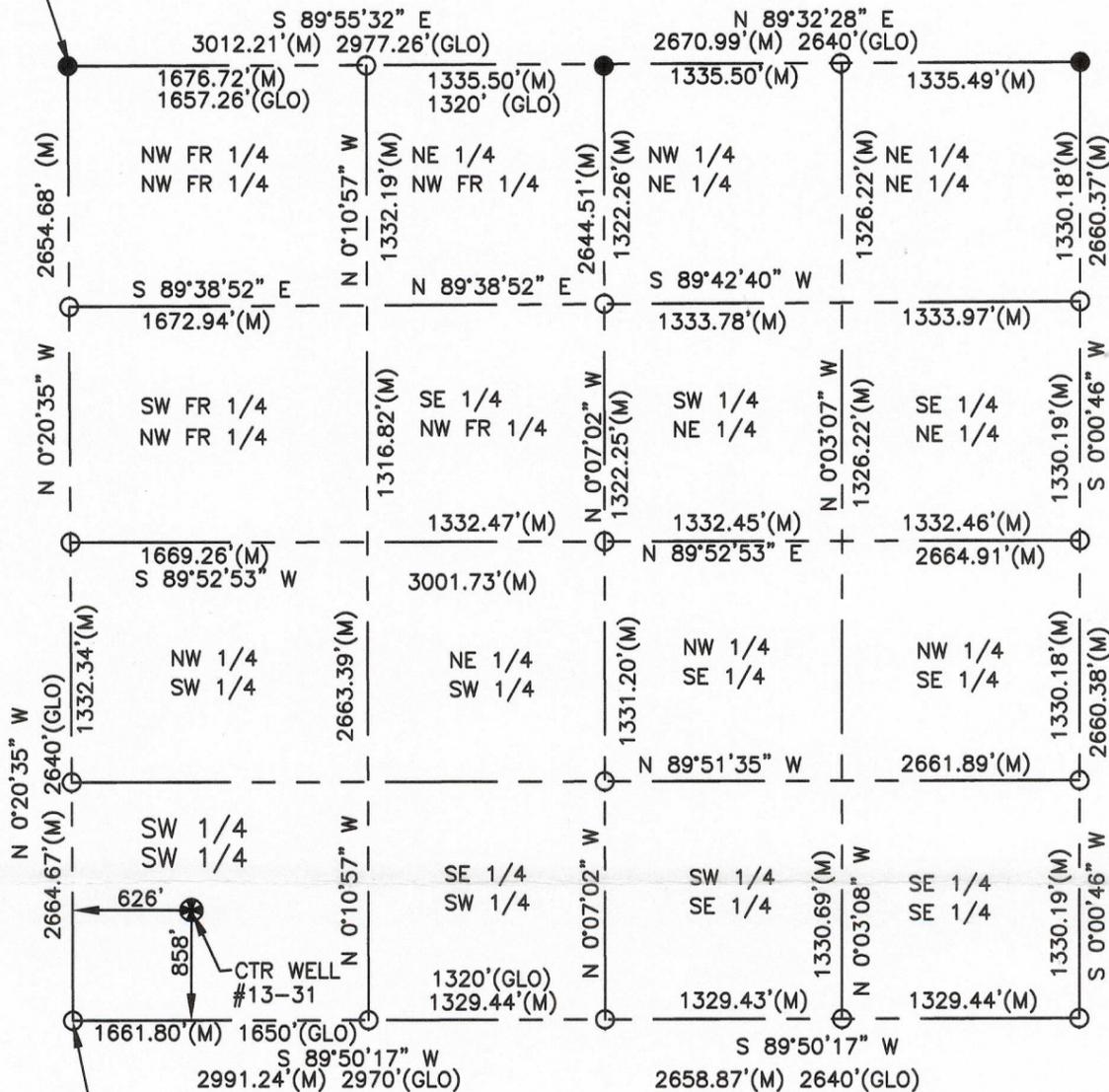
GAS WELL MAP
G. HALES #13-31
in
SW 1/4 SW 1/4 SEC. 31, T56N, R31W
CLINTON COUNTY, MISSOURI

RECEIVED

JUL 11 2002

MO Oil & Gas Council

NW COR. NW 1/4
SEC. 31, T56N, R31W



SW COR. SW 1/4
SEC. 31, T56N, R31W
CALCULATED CORNER

LEGEND:

- SECTION LINE
- SET 5/8"X24" BAR W/L.S. CAP
- CALCULATED CORNER
- CENTER PROPOSED WELL
- MEASURED DISTANCE 2670.99' (M)
- GOVERNMENT LAND OFFICE DISTANCE 2640' (GLO)

SURVEY NOTES:

1. NORTH BASED ON THE NORTH LINE OF THE NORTHEAST QUARTER ASSUMED TO BEAR N89°32'28"W FOR THIS SURVEY
2. THIS SURVEY WAS PERFORMED WITHOUT THE BENEFIT OF A PROPER TITLE REPORT. EASEMENTS AND OTHER CONDITIONS MAY EXIST AND COULD BE DISCLOSED BY A PROPER TITLE REPORT, WHICH WAS NOT FURNISHED BY THE CLIENT.
3. BASIS OF ELEVATION: SPOT ELEVATION AT THE NORTHEAST CORNER OF THE NORTHWEST ONE-QUARTER SECTION 32, TOWNSHIP 56 NORTH, RANGE 31 WEST FROM THE PERRIN, MISSOURI QUAD SHEET. ELEVATION 1004.92
4. CENTER OF G. HALES WELL #13-31 ELEVATION AT UNGRADED GROUND 1032.76
LATITUDE 39°37'06"N
LONGITUDE 94°25'50"W



SCALE 1" = 1000'



CERTIFICATION: THIS IS TO CERTIFY THAT THIS SURVEY WAS EXECUTED IN ACCORDANCE WITH THE MINIMUM STANDARDS FOR URBAN PROPERTY BOUNDARY SURVEY AS SET FORTH BY THE MISSOURI BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS. WE HAVE THIS DAY MADE A SURVEY OF THE HEREIN DESCRIBED PROPERTY AND THE RESULTS OF SAID SURVEY ARE AS SHOWN ON THIS PLAT.

BY:
BARTLETT & WEST ENGINEERS, INC.
HARLAN G. ROSS MO P.L.S. #2002000253
THIS 5th DAY OF July, 2002.



PROJECT NO. 12000.368
CLIENT: WESTERN LAND SERVICES
1100 CONRAD INDUSTRIAL DRIVE
LUDINGTON, MICHIGAN 49431

SHEET 1 OF 2

Bartlett & West
Engineers, Inc.

1322 N. 36TH ST.
ST. JOSEPH, MISSOURI 64508
(816) 384-3551
FAX (816) 384-8548
Jefferson City, MO
Des Moines, IA
Bismarck, ND
Lawrence, KS
Lanexa, KS
Topeka, KS
Little Rock, AR

Drawing name: N:\12xxx\12000\12000368\dwg\12000368GHales#13-31.dwg

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JUL 11 2002

MO Oil & Gas Council

TARGET IS 39°37'06"N, 94°25'50"W



VICINITY MAP
G. HALES #13-31

PREPARED FOR:
WESTERN LAND SERVICES
1100 CONRAD INDUSTRIAL DRIVE
LUDINGTON, MICHIGAN 49431



Bartlett & West
Engineers, Inc.

1322 N. 38TH ST.
ST. JOSEPH, MISSOURI 64508
(816) 384-3551
FAX (816) 384-8548

Jefferson City, MO
Des Moines, IA
Siemrock, ND
Lawrence, KS
Lawrence, KS
Topeka, KS
Little Rock, AR

Drawing name: N:\12xxx\12000\12000368\dwg\12000368GHales#13-31.dwg