

State of Colorado  
Oil and Gas Conservation

1120 Lincoln Street, Suite 801, Denver, Colorado 80202 Phone: (303)894-2100 Fax: (303)894-2109



FOR COGCC USE ONLY

RECEIVED

MAY 31 05

Plugging Bond Surety ID#

1. ☒ Drill, ☐ Deepen, ☐ Re-enter, ☐ Recomplete and Operate

2. TYPE OF WELL  
OIL ☐ GAS ☒ COALBED ☐ OTHER: \_\_\_\_\_  
SINGLE ZONE ☐ MULTIPLE ZONES ☒ COMMINGLE ZONES ☒

Refilling ☐  
Sidetrack ☐

3. COGCC Operator Number: 69175 4. Name of Operator: Petroleum Development Corporation

5. Address: 103 East Main Street  
City: Bridgeport State: WV Zip: 26330

6. Contact Name: Gary W. Fridley Phone: (304) 842-6256 Fax: (304) 326-2578

7. Well Name: Howard Lake Well Number: 42-9

8. Unit Name (if appl): Unit Number: \_\_\_\_\_

9. Proposed Total Depth: 8195'

10. QtrQtr: SENE Sec: 9 Twp: 6N Rng: 64W Meridian: 6th P.M.  
Footage from Exterior Section Lines  
At Surface: 2100' FNL x 500' FEL

11. Field Name: Wattenberg Field Number: 90750

12. Ground Elevation: 4850' 13. County: Weld

14. If well is: ☐ Directional ☐ Horizontal (highly deviated), submit deviated drilling plan.  
Footage from Exterior Section Lines and Sec Twp Rng  
At Top of Production Zone: \_\_\_\_\_ At Bottom Hole: \_\_\_\_\_

15. Is location in a high density area (Rule 603b)? ☐ Yes ☒ No

16. Distance to the nearest building, public road, above ground utility or railroad: 500' to a public road

17. Distance to Nearest Property Line: 500' 18. Distance to nearest well permitted/completed in the same formation: 1300'

Complete the Attachment Checklist		OP	COGCC
APD Orig & 1 Copy		X	
Form 2A		X	
Well location plat		X	
Topo map		X	
Mineral lease map			
Surface agmt/Surety			
30 Day notice letter			
Deviated Drilling Plan			
Exception Loc Request			
Exception Loc Waivers			
H2S Contingency Plan			
Federal Drilling Permit			

19. LEASE, SPACING AND POOLING INFORMATION

Objective Formation(s)	Formation Code	Spacing Order Number (s)	Unit Acreage Assigned to Well	Unit Configuration (N/2, SE/4, etc.)
Dakota, J-Sand	DKJ			
Nipbrara, Codell	NBCD	407-87	80 acres	E/2 NE/4

20. Mineral Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian Lease # \_\_\_\_\_  
21. Surface Ownership: ☒ Fee ☐ State ☐ Federal ☐ Indian  
22. Is the Surface Owner also the Mineral Owner? ☐ Yes ☒ No Surface Surety ID# 19990086  
If Yes: Is the Surface Owner(s) signature on the lease? ☐ Yes ☒ No  
If No: ☐ Surface Owners Agreement Attached or ☒ \$25,000 Blanket Surface Bond ☐ \$2,000 Surface Bond ☐ \$5,000 Surface Bond  
23. Using standard QtrQtr, Sec, Twp, Rng format enter entire mineral lease description upon which this proposed wellsite is located (attach separate sheet/map if you prefer):  
All Section 9 T6N R64W  
24. Distance to Nearest Mineral Lease Line: 500' 25. Total Acres in Lease: 640 acres

DRILLING PLANS AND PROCEDURES

26. Is H2S anticipated? ☐ Yes ☒ No If Yes, attach contingency plan.

27. Will salt sections be encountered during drilling? ☐ Yes ☒ No

28. Will salt (>15,000 ppm TDS Cl) or oil based muds be used during drilling? ☐ Yes ☒ No

29. If questions 27 or 28 are yes, is this location in a sensitive area (Rule 903)? ☐ Yes ☒ No If 27, 28 or 29 are "Yes" a pit permit may be required.

30. Mud disposal: ☐ Offsite ☒ Onsite  
Method: ☒ Land Farming ☐ Land Spreading ☐ Disposal Facility ☐ Other: \_\_\_\_\_

NOTE: The use of an earthen pit for Recompletion fluids requires a pit permit (Rule 905b.) If air/gas drilling, notify local fire officials.

String	Size of Hole	Size of Casing	Weight Per Foot	Setting Depth	Sacks Cement	Cement Bottom	Cement Top
Conductor							
Surface	12 1/4"	8 5/8"	24#	435' 510'	300 sks	435' 510'	surface
Production	7 7/8"	4 1/2"	10.5#	8195'	225 sks "G"	8195'	6695'
					225 sks "lite"	6695'	3695'

31. BOP Equipment Type: ☐ Annular Preventor ☒ Double Ram ☐ Rotating Head ☐ None

32. Comments: \_\_\_\_\_

33. Initial Rule 306 Consultation took place on (date) 5/06/05, was waived, or is not required. Provide supporting documentation if consultation has been waived or if good faith effort did not result in consultation.  
PERMIT SUBMITTED TO COGCC PRIOR TO COMPLIANCE WITH RULE 306 CONSULTATION SHALL BE RETURNED UNAPPROVED.  
I hereby certify that a complete permit package has been sent to the applicable Local Government Designee(s), and all statements made in this form are, to the best of my knowledge, true, correct, and complete.

Signed: Gary W. Fridley Print Name: Gary W. Fridley  
Title: Landman Date: May 25, 2005

Based on the information provided herein, this Application for Permit-to-Drill complies with COGCC Rules and applicable orders and is hereby approved.

COGCC Approved: [Signature] Director of COGCC

Date: 6-30-05

Permit Number: 20051896

Expiration Date: 6-29-06

CONDITIONS OF APPROVAL, IF ANY:

API NUMBER  
05-123-23063-00


NOTE SURFACE CASING DEPTH CHANGE.


CONTACT ED BINKLEY 48 HOURS PRIOR TO SPUD AT 970-506-9834.

COMPLY WITH COGCC RULE 317.i. AND PROVIDE 200 FT CEMENT COVERAGE

ABOVE THE NIOBRARA FORMATION. VERIFY COVERAGE WITH A CEMENT BOND LOG.



 s\_cogcc\_head.jpg (11540 bytes)

 s\_head\_fill.jpg (981 bytes)



Division of Water Resources Well Information


<b>Receipt:</b> 0494289	<b>Permit Rcvd:</b> 06/24/2002
<b>Well Name:</b>	
<b>Division:</b> 1	<b>County:</b> 20
<b>PermitNo:</b> 243420	<b>Permit Date:</b> 08/27/2002
<b>PermitRpl:</b>	<b>PermitSuf:</b>
<b>ActCode:</b> NP	<b>WD:</b> 1
<b>Basin:</b> 00	<b>MD:</b> 00
<b>Name:</b> FREUND INVESTMENTS LLC	<b>Phone:</b> 3033419310
<b>Address:</b> 15460 E BATAVIA DR	
<b>City:</b> AURORA, CO 80011-	
<b>Meridian:</b> S	<b>Range:</b> 64 W
<b>Township:</b> 6 N	<b>Section:</b> 8
<b>S of Ute Line:</b>	<b>QTRQTR:</b> NESE
<b>CoordSNS:</b> 1950 S	<b>CoordSEW:</b> 200 E
<b>SubDiv:</b> HILLSIDE RANCHES AMENDED	<b>Lot:</b> 12
<b>Block:</b>	<b>Filing:</b>
<b>Aquifer 1:</b> GW	<b>Aquifer 2:</b>
<b>Elevation:</b>	<b>Depth:</b> 460
<b>Top Perf:</b> 310	<b>Bottom Perf:</b> 460
<b>Level:</b> 250	<b>Yield:</b> 9.0
<b>Case:</b>	<b>Irrigated Area:</b> 1.0ACRES
<b>Abdmt Req:</b> 0	<b>Acre Ft:</b>
<b>Use Codes:</b> 8 , L	<b>Driller:</b> 1149
<b>Pump Inst:</b> 1149	<b>PI Date:</b> 01/08/2004
<b>Statute:</b> 6023	<b>Statute Code:</b> AR
<b>Statute Date:</b> 08/07/2002	<b>Report Rcvd:</b> 06/13/2003
<b>Meter:</b> 0	<b>Related Well:</b>
<b>Well Suffix:</b>	<b>Repl Xref:</b>
<b>Well Const Rpt:</b>	<b>Beneficial Use:</b>
<b>Well Cmpl Date:</b> 05/16/2003	<b>Pump Inst Date:</b> 11/19/2003
<b>Logged:</b> 0	<b>Water Quality Data:</b> 0
<b>Proposed Depth:</b>	<b>Prop Yield:</b> 15.0
<b>Prop Yrly Appr:</b>	<b>Well Type:</b>
<b>Valid Permit:</b> 0	<b>Prmt Exp Notice:</b>
<b>Parcel Id:</b>	<b>Parcel Size:</b> 40.0
<b>Engineer:</b> JMW	<b>Last Transaction Code:</b> PI
<b>Last Tran:</b> 03/18/2004	<b>Last Update:</b> JD1
<b>Comment:</b>	




Colorado

Oil & Gas Conservation Commission

COGCC Results





Selected Items Report

Oil and Gas Wells Selected		
Filter Results by Formation <input type="text" value="Include"/>		<div><div>CODL</div><div>JSND</div><div>NB-CD</div></div> <div>Filter</div>
WELL DESCRIPTION	LOCATION	WELL INFORMATION
05-123-18581, PETRO-CANADA RESOURCES (USA) INC , 3-33 DINGES	SWSW 3 6N -64W (6)	Sidetrack TD Formation Status 00 7180 NB-CD PR
05-123-21624, PETRO-CANADA RESOURCES (USA) INC , 3-32 EGGE	NWSW 3 6N -64W (6)	Sidetrack TD Formation Status 00 7172 CODL PR
05-123-22346, PETROLEUM DEVELOPMENT CORP , 34-4 ERICKSON	SWSE 4 6N -64W (6)	Sidetrack TD Formation Status
05-123-22359, PETROLEUM DEVELOPMENT CORP , 33-4 LAWLEY	NWSE 4 6N -64W (6)	Sidetrack TD Formation Status 00 7333 CODL PR
05-123-22360, PETROLEUM DEVELOPMENT CORP , 43-4 LAWLEY	NESE 4 6N -64W (6)	Sidetrack TD Formation Status 00 7291 CODL PR
05-123-22424, PETROLEUM DEVELOPMENT CORP , 44-4D LAWLEY	NESE 4 6N -64W (6)	Sidetrack TD Formation Status 00 7333 CODL PR
05-123-22573, PETROLEUM DEVELOPMENT CORP , 24-4 ERICKSON	SESW 4 6N -64W (6)	Sidetrack TD Formation Status
05-123-22890, PETROLEUM DEVELOPMENT CORP , 11-9 HOWARD LAKE	NWNW 9 6N -64W (6)	Sidetrack TD Formation Status
05-123-22344, PETROLEUM DEVELOPMENT CORP , 12-9 HOWARD LAKE	SWNW 9 6N -64W (6)	Sidetrack TD Formation Status 00 7281 CODL PR
05-123-11930, JENEX PETROLEUM CORP , 5 OWL CREEK	NENE 9 6N -64W (6)	Sidetrack TD Formation Status 00 7615 NB-CD PA
05-123-12302, JENEX PETROLEUM CORP , 31-10-6-64 EHRlich-FA	NWNE 10 6N -64W (6)	Sidetrack TD Formation Status 00 7514 CODL PA
05-123-12304, JENEX PETROLEUM CORP , 13-10-6-64 HEIDENREICH, OLIVER-FA	NWSW 10 6N -64W (6)	Sidetrack TD Formation Status 00 7595 NB-CD PR
05-123-12305, JENEX PETROLEUM CORP , 11-10 HIRD TRUST	NWNW 10 6N -64W (6)	Sidetrack TD Formation Status 00 7663 JSND RC 00 7663 NB-CD PR
05-123-07155, SIMMONS ENERGY CORP , 1 HEIDENREICH	SWSW 10 6N -64W (6)	Sidetrack TD Formation Status 00 7655 CODL PA
05-123-22596, PETROLEUM DEVELOPMENT CORP , 31-10 ADAMS	NWNE 10 6N -64W (6)	Sidetrack TD Formation Status
05-123-22630, PETROLEUM DEVELOPMENT CORP , 33-10 PHINNEY	NWSE 10 6N -64W (6)	Sidetrack TD Formation Status
05-123-22570, PETROLEUM DEVELOPMENT CORP , 42-10 WOLFRUM	SENE 10 6N -64W (6)	Sidetrack TD Formation Status
05-123-11817, JENEX PETROLEUM CORP , 3 OWL CREEK	NENW 15 6N -64W (6)	Sidetrack TD Formation Status 00 7554 NB-CD PA
05-123-20401, PETROLEUM DEVELOPMENT CORP , 32-16 STATE 8461	SWNE 16 6N -64W (6)	Sidetrack TD Formation Status 00 7231 CODL PR
05-123-20753, PETROLEUM DEVELOPMENT CORP , 41-16 STATE 81	NENE 16 6N -64W (6)	Sidetrack TD Formation Status 00 7238 CODL PR
05-123-20772, PETROLEUM DEVELOPMENT CORP , 21-16 STATE 8461	NENW 16 6N -64W (6)	Sidetrack TD Formation Status 00 7237 CODL DG
05-123-20801, PETROLEUM DEVELOPMENT CORP , 16C STATE	NWNE 16 6N -64W (6)	Sidetrack TD Formation Status 00 7234 CODL PR



05-123-13980, LYCO ENERGY CORPORATION , 41-16 STATE LEASE 81	NENE 16 6N -64W (6)	Sidetrack TD Formation Status
05-123-13984, PETROLEUM DEVELOPMENT CORP , 31-16 STATE LEASE 81	NWNE 16 6N -64W (6)	Sidetrack TD Formation Status 00        7218 NB-CD    PR
05-123-14089, PETROLEUM DEVELOPMENT CORP , 42-16 STATE LEASE 81	SENE 16 6N -64W (6)	Sidetrack TD Formation Status 00        7170 NB-CD    PR

Facilities Selected			
FACILITY DESCRIPTION	LOCATION	PIT INFORMATION	
		Type	Unlined    Status

Water Wells Selected			
Filter Results by Depth <input type="text" value="Greater than"/> <input type="button" value="Filter"/>			

WELL DESCRIPTION	LOCATION	WELL INFORMATION			
		Depth	Top Perf	Bottom Perf	Aquifer
Receipt=0036153, Permit=0036153-MH-, HEISTERMANN DEBBIE	SW 3 6N-64W	0	0	0	GW
Receipt=0445523, Permit=0218221--, EGGE DENNIS L	NESW 3 6N-64W	340	200	340	GW
Receipt=0460337A, Permit=0225604--, MACK VINCENT S	NWSW 3 6N-64W	0	0	0	GW
Receipt=0460337B, Permit=0225604--A, MACK VINCENT S	NWSW 3 6N-64W	340	270	330	GW
Receipt=0494289, Permit=0243420--, FREUND INVESTMENTS LLC	NESE 8 6N-64W	460	310	460	GW
Receipt=0448418, Permit=0220420--, STRASSER JOHN C & HANSON LORI J	SWSW 9 6N-64W	0	0	0	GW
Receipt=0037568, Permit=0037568-MH-, WOLFRUM JIMMIE & SHARON	SENE 10 6N-64W	0	0	0	GW
Receipt=0478298, Permit=0235728--, PENNINGTON ROBERT	NWNW 10 6N-64W	360	200	360	GW
Receipt=9060156, Permit=0009382--, HEIDENREICH OLIVER	NWSW 10 6N-64W	80	0	0	GW
Receipt=9058964, Permit=0002848-F-, ROTH EMANUEL JR	SWSW 10 6N-64W	48	0	0	GW
Receipt=9060152, Permit=0009308--, HEIDENREICH ALEX	SWSW 10 6N-64W	100	0	0	GW
Receipt=0519053, Permit=0255215--, MCGRAW JARRETT	NENW 16 6N-64W	0	0	0	GW



Well name and number:

Howard Lake 42-9  
SENE-S9-T6N-R64W  
Survey Plat Check list

number	Item	
	8-1/2" x 11" scaled drawing of the entire section	OK
1	Dimensions on adjacent exterior section lines sufficient to completely describe the quarter section containing the proposed well shall be indicated	OK
1a	If dimensions are not field measured, state how the dimensions were determined	OK
2	For directional drilling into an adjacent section, that section shall also be shown on the location plat and dimensions on exterior section lines sufficient to completely describe the quarter section containing the proposed productive interval and bottom hole location shall be indicated.	N/A
3	For irregular, partial or truncated sections, dimensions will be furnished to completely describe the entire section containing the proposed well.	N/A
4	The field measured distances from the nearer north/south and nearer east/west section lines shall be measured at ninety (90) degrees from said section lines to the well location and referenced on the plat.	OK
4.1*	For unsurveyed land grants and other areas where an official public land survey system does not exist the well locations shall be spotted as footages on a protracted section plat using Global Positioning System (GPS) technology and also reported as latitude and longitude in accordance with the requirements set forth below: in 4A, 4B, 4C	N/A
4A*	All GPS data reported to the Commission shall be differentially corrected using base station data or other correction sources. The base station or other correction source shall be identified and reported with the coordinate values.	
4B*	Coordinates shall be reported as latitude and longitude in decimal degrees to an accuracy of at least five (5) decimal places (e.g.; latitude 37.12345 N, longitude 104.45632 W).	
4C*	All data shall be referenced to the North American Datum (NAD) of 1927.	
4D	The date of the survey shall be reported.	OK
5	A map legend	
6	A North Arrow	
7	A scale expressed as an equivalent (e.g. 1" = 1000').	
8	A bar scale.	
9	The ground elevation.	
10	The basis of the elevation (how it was calculated or its source).	
11	The basis of bearing or interior angles used.	
12	Complete description of monuments and/or collateral evidence found; all aliquot corners used shall be described.	
13	The legal land description by section, township, range, principal meridian, baseline and county.	
14	Operator name	
15	Well name and number	OK
16	Date of completion of scaled drawing	
17a	All visible improvements within two hundred (200) feet of a wellhead (or, in a high density area within four hundred (400) feet of a wellhead) shall be physically tied in and plotted on the well location plat or on an addendum, with a horizontal distance and approximate bearing from the well location.	N/A
17b	Visible improvements shall include, but not be limited to, all buildings, publicly maintained roads and trails, major above ground utility lines, railroads, pipelines, mines, oil wells, gas wells, injection wells, water wells, visible plugged wells, sewers with manholes, standing bodies of water, and natural channels including permanent canals and ditches through which water flows.	N/A
17c	If there are no visible improvements within two hundred (200) feet of a wellhead (or in a high density area within four hundred (400) feet of a wellhead), it shall be so noted on the Permit-to-Drill, Form 2.	OK
18	Surface use shall be described within the two hundred (200) foot radius of a wellhead (or in a high density area within the four hundred (400) foot radius of a wellhead).	OK

\* Only required for unsurveyed land grants and other areas where an official public land survey system does not exist.

The survey plat you submitted with your permit was found to be in non-compliance with COGCC rule 303c. See above checklist. If a survey plat is not in compliance with rule 303c the operator will be notified and the permit will be placed on hold until an adequate replacement is supplied to the COGCC.

Good