STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐

APPLICATION FOR PERMIT TO DRILL

1. WELL NAME and NUMBER
Meagher 12-21-4-2

2. TYPE OF WORK
DRILL NEW WELL ■ REENTER P&A WELL ○ DEEPEN WELL ○

3. FIELD OR WILDCAT
UNDESIGNATED

4. TYPE OF WELL
Oil Well Coalbed Methane Well: NO

5. UNIT or COMMUNITIZATION AGREEMENT NAME

6. NAME OF OPERATOR
NEWFIELD PRODUCTION COMPANY

7. OPERATOR PHONE
435 646-4825

8. ADDRESS OF OPERATOR
Rt 3 Box 3630 , Myton, UT, 84052

9. OPERATOR E-MAIL
mcrozier@newfield.com

10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)
FEE

11. MINERAL OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ■

12. SURFACE OWNERSHIP
FEDERAL ○ INDIAN ○ STATE ○ FEE ■

13. NAME OF SURFACE OWNER (if box 12 = 'fee')
Emerald Phoenix Oil Company

14. SURFACE OWNER PHONE (if box 12 = 'fee')

15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')
111 Lincoln Rd #4, Spokane, WA 99208

16. SURFACE OWNER E-MAIL (if box 12 = 'fee')

17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')

18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS
YES ○ (Submit Commingling Application) NO ■

19. SLANT
VERTICAL ■ DIRECTIONAL ○ HORIZONTAL ○

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	1982 FSL 658 FWL	NWSW	21	4.0 S	2.0 W	U
Top of Uppermost Producing Zone	1982 FSL 658 FWL	NWSW	21	4.0 S	2.0 W	U
At Total Depth	1982 FSL 658 FWL	NWSW	21	4.0 S	2.0 W	U

21. COUNTY
DUCHESNE

22. DISTANCE TO NEAREST LEASE LINE (Feet)
658

23. NUMBER OF ACRES IN DRILLING UNIT
40

25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed)
1316

26. PROPOSED DEPTH
MD: 7065 TVD: 7065

27. ELEVATION - GROUND LEVEL
5367

28. BOND NUMBER
B001834

29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE
437478

ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

- ☑ **WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER**
- ☑ **COMPLETE DRILLING PLAN**
- ☑ **AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)**
- ☐ **FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER**
- ☐ **DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)**
- ☑ **TOPOGRAPHICAL MAP**

NAME Mandie Crozier	**TITLE** Regulatory Tech	**PHONE** 435 646-4825
SIGNATURE	**DATE** 06/22/2010	**EMAIL** mcrozier@newfield.com

API NUMBER ASSIGNED
43013504020000

APPROVAL

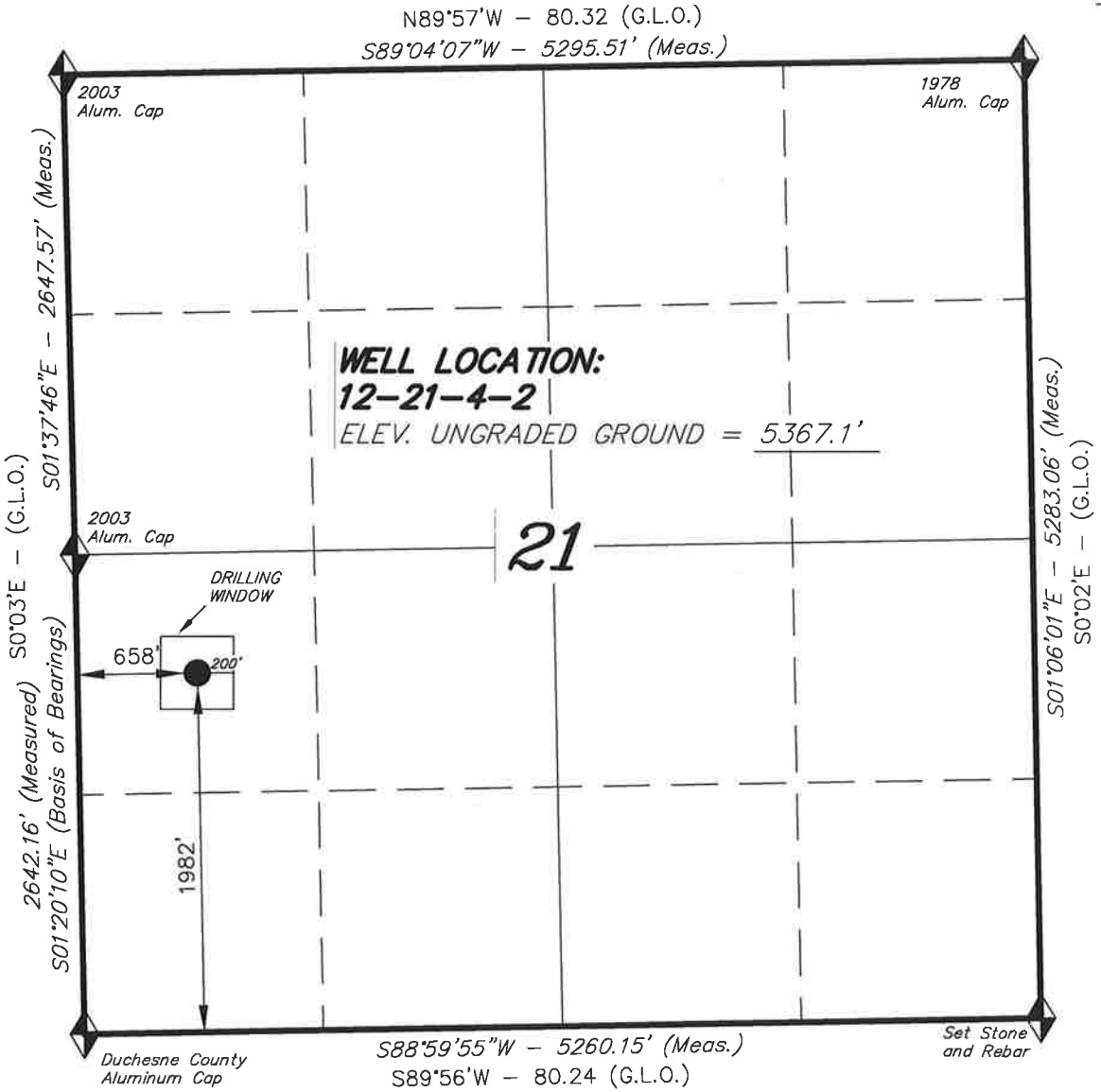
Permit Manager

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Prod	7.875	5.5	0	7065		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 LT&C	7065	15.5			

Proposed Hole, Casing, and Cement						
String	**Hole Size**	**Casing Size**	**Top (MD)**	**Bottom (MD)**		
Surf	12.25	8.625	0	400		
Pipe	**Grade**	**Length**	**Weight**			
	Grade J-55 ST&C	400	24.0			

'APIWellNo:43013504020000'

T4S, R2W, U.S.B.&M.



NEWFIELD EXPLORATION COMPANY

WELL LOCATION, 12–21–4–2, LOCATED AS SHOWN IN THE NW 1/4 SW 1/4 OF SECTION 21, T4S, R2W, U.S.B.&M. DUCHESNE COUNTY, UTAH.

1000' 500' 0' 1000'

BAR SCALE

◆ = SECTION CORNERS LOCATED

N

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

REGISTERED LAND SURVEYOR No.189377 STATE OF UTAH

STACY W. STEWART

REGISTERED LAND SURVEYOR
REGISTRATION No. 189377
STATE OF UTAH

BASIS OF ELEV; Elevations are base on LOCATION: an N.G.S. OPUS Correction. LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

12–21–4–2
(Surface Location) NAD 83
LATITUDE = 40° 07' 07.07"
LONGITUDE = 110° 07' 17.10"

TRI STATE LAND SURVEYING & CONSULTING
180 NORTH VERNAL AVE. – VERNAL, UTAH 84078
(435) 781–2501

DATE SURVEYED: 03–02–10	SURVEYED BY: T.P.
DATE DRAWN: 03–03–10	DRAWN BY: M.W.
REVISED:	SCALE: 1" = 1000'

MEMORANDUM
of
EASEMENT, RIGHT-OF-WAY
and
SURFACE USE AGREEMENT

This Easement and Surface Use Agreement ("Agreement") is entered into this 2nd day of June, 2010 by and between, **A-M, Inc, Sam Arentz, President whose address is 7350 Island Queen Drive, Sparks, NV 89436,** ("Surface Owner," whether one or more), and NEWFIELD PRODUCTION COMPANY, a Texas corporation ("NEWFIELD"), with offices at 1001 Seventeenth Street, Suite 2000, Denver, Colorado 80202, covering certain lands, (the "Lands") situated in Duchesne County, Utah described as follows:

Township 4 South, Range 2 West Uintah Special Base and Meridian
Section 20: NESE, NWSE
Section 21: NESW, NWSW

160 acres more or less
Duchesne County, Utah

For and in consideration of the sum of ten dollars ($10.00), and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby agree to the terms and provisions set forth as follows:

1. Compensation for Well; Release of All Claims

NEWFIELD shall pay to Surface Owner the sum as set forth in and according to the terms of that certain Letter Agreement for Easement, Right-of Way and Surface Use by and between Surface Owner and NEWFIELD, dated June 2, 2010, as full payment and satisfaction for any and all detriment, depreciation, injury or damage of any nature to the Lands or growing crops thereon that may occur as a result of NEWFIELD's drilling or completion operations or its continuing activities for the production or transportation of oil, gas, or other hydrocarbons or products associated with the foregoing including, but not limited to, surface use, access, pipelines, gathering lines, pipeline interconnections, and any and all other reasonable or customary uses of land related to said operations or activities.

2. Grant of Right of Way and Easement

Surface Owner hereby grants, bargains, leases, assigns, and conveys to NEWFIELD an easement and right-of-way for the purpose of construction, using and maintaining access roads, locations for surface equipment and subsurface gathering lines for each well drilled upon the Lands, pipelines, and pipeline interconnections for two years from date of this agreement and so long thereafter as NEWFIELD's oil and gas leases remain in effect.

This Agreement shall be binding upon the respective heirs, executors, administrators, successors, and assigns of the undersigned.

This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original for all purposes.

These Parties hereto have executed this document effective as of the day first above written.

SURFACE OWNER

A-M, INC

By: _____
Sam Arentz, President

NEWFIELD PRODUCTION COMPANY

By: _____
Dan Shewmake
Vice President - Development

STATE OF NEVADA)
)ss
COUNTY OF Washoe)

This instrument was acknowledged before me this 8th day of June, 2010 by **Sam Arentz, President for A-M, INC.**

Witness my hand and official seal.

Johnie Sue Bussard
Notary Public

My commission expires Aug 11, 2010

Notary Public - State of Nevada
COUNTY OF WASHOE
JOHNIE SUE BUSSARD
My Appointment Expires Aug 11, 2010

STATE OF COLORADO)
)ss
COUNTY OF DENVER)

This instrument was acknowledged before me this _____ day of _____, 2010 by **Dan Shewmake, as Vice President of Development for Newfield Production Company**, a Texas corporation, on behalf of the corporation.

Witness my hand and official seal.

_____
Notary Public

My commission expires _____

MEMORANDUM
of
EASEMENT, RIGHT-OF-WAY
and
SURFACE USE AGREEMENT

This Easement and Surface Use Agreement ("Agreement") is entered into this 2nd day of June, 2010 by and between, **Emerald Phoenix Oil Compay, LLC, Jim Ivers III, General Manager whose address is 111 Lincoln Road #4, Spokane, WA 99208,** ("Surface Owner," whether one or more), and NEWFIELD PRODUCTION COMPANY, a Texas corporation ("NEWFIELD"), with offices at 1001 Seventeenth Street, Suite 2000, Denver, Colorado 80202, covering certain lands, (the "Lands") situated in Duchesne County, Utah described as follows:

Township 4 South, Range 2 West Uintah Special Base and Meridian
Section 20: NESE, NWSE
Section 21: NESW, NWSW

160 acres more or less
Duchesne County, Utah

For and in consideration of the sum of ten dollars ($10.00), and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby agree to the terms and provisions set forth as follows:

1. Compensation for Well; Release of All Claims

NEWFIELD shall pay to Surface Owner the sum as set forth in and according to the terms of that certain Letter Agreement for Easement, Right-of Way and Surface Use by and between Surface Owner and NEWFIELD, dated June 2, 2010, as full payment and satisfaction for any and all detriment, depreciation, injury or damage of any nature to the Lands or growing crops thereon that may occur as a result of NEWFIELD's drilling or completion operations or its continuing activities for the production or transportation of oil, gas, or other hydrocarbons or products associated with the foregoing including, but not limited to, surface use, access, pipelines, gathering lines, pipeline interconnections, and any and all other reasonable or customary uses of land related to said operations or activities.

2. Grant of Right of Way and Easement

Surface Owner hereby grants, bargains, leases, assigns, and conveys to NEWFIELD an easement and right-of-way for the purpose of construction, using and maintaining access roads, locations for surface equipment and subsurface gathering lines for each well drilled upon the Lands, pipelines, and pipeline interconnections for two years from date of this agreement and so long thereafter as NEWFIELD's oil and gas leases remain in effect.

This Agreement shall be binding upon the respective heirs, executors, administrators, successors, and assigns of the undersigned.

This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original for all purposes.

These Parties hereto have executed this document effective as of the day first above written.

SURFACE OWNER

EMERALD PHOENIX OIL COMPANY, LLC

By: Jim Ivers III
Jim Ivers III, General Manager

NEWFIELD PRODUCTION COMPANY

By: _____
Dan Shewmake
Vice President - Development

STATE OF WASHINGTON)
)ss
COUNTY OF Spokane)

This instrument was acknowledged before me this 10th day of June, 2010 by **Jim Ivers III, General Manager for Emerald Phoenix Oil Company, LLC.**

Witness my hand and official seal.

Notary Public

My commission expires Jan 4, 2013

Notary Public
State of Washington
JESSICA L. WALTERS
MY COMMISSION EXPIRES
January 04, 2013

STATE OF COLORADO)
)ss
COUNTY OF DENVER)

This instrument was acknowledged before me this _____ day of _____, 2010 by **Dan Shewmake, as Vice President of Development for Newfield Production Company**, a Texas corporation, on behalf of the corporation.

Witness my hand and official seal.

Notary Public

My commission expires _____

MEMORANDUM
of
EASEMENT, RIGHT-OF-WAY
and
SURFACE USE AGREEMENT

This Easement and Surface Use Agreement ("Agreement") is entered into this 2nd day of June, 2010 by and between, **Dale Meagher whose address is PO Box 122, Vernal , UT 84078,** ("Surface Owner," whether one or more), and NEWFIELD PRODUCTION COMPANY, a Texas corporation ("NEWFIELD"), with offices at 1001 Seventeenth Street, Suite 2000, Denver, Colorado 80202, covering certain lands, (the "Lands") situated in Duchesne County, Utah described as follows:

Township 4 South, Range 2 West Uintah Special Base and Meridian
Section 20: NESE, NWSE
Section 21: NESW, NWSW

160 acres more or less
Duchesne County, Utah

For and in consideration of the sum of ten dollars ($10.00), and other valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby agree to the terms and provisions set forth as follows:

1. Compensation for Well; Release of All Claims

NEWFIELD shall pay to Surface Owner the sum as set forth in and according to the terms of that certain Letter Agreement for Easement, Right-of Way and Surface Use by and between Surface Owner and NEWFIELD, dated June 2, 2010, as full payment and satisfaction for any and all detriment, depreciation, injury or damage of any nature to the Lands or growing crops thereon that may occur as a result of NEWFIELD's drilling or completion operations or its continuing activities for the production or transportation of oil, gas, or other hydrocarbons or products associated with the foregoing including, but not limited to, surface use, access, pipelines, gathering lines, pipeline interconnections, and any and all other reasonable or customary uses of land related to said operations or activities.

2. Grant of Right of Way and Easement

Surface Owner hereby grants, bargains, leases, assigns, and conveys to NEWFIELD an easement and right-of-way for the purpose of construction, using and maintaining access roads, locations for surface equipment and subsurface gathering lines for each well drilled upon the Lands, pipelines, and pipeline interconnections for two years from date of this agreement and so long thereafter as NEWFIELD's oil and gas leases remain in effect.

This Agreement shall be binding upon the respective heirs, executors, administrators, successors, and assigns of the undersigned.

This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original for all purposes.

These Parties hereto have executed this document effective as of the day first above written.

SURFACE OWNER

DALE MEAGHER

By: Dale Meagher
Dale Meagher, Surface Owner

NEWFIELD PRODUCTION COMPANY

By: _____
Dan Shewmake
Vice President - Development

STATE OF Utah)
)ss
COUNTY OF Uintah)

This instrument was acknowledged before me this 11 day of June, 2010 by **Dale Meagher,** Private Surface Owner.

Witness my hand and official seal.

Jolene Mohar
Notary Public

My commission expires 6-30-12

NOTARY PUBLIC
JOLENE MOHAR
3 West Main
Vernal, UT 84078
My Commission Expires
June 30, 2012
STATE OF UTAH

STATE OF COLORADO)
)ss
COUNTY OF DENVER)

This instrument was acknowledged before me this_____day of _____, 2010 by **Dan Shewmake, as Vice President of Development for Newfield Production Company**, a Texas corporation, on behalf of the corporation.

Witness my hand and official seal.

_____
Notary Public

My commission expires _____

'APIWellNo:43013504020000'

NEWFIELD PRODUCTION COMPANY
MEAGHER 12-21-4-2
NW/SW SECTION 21, T4S, R2W
DUCHESNE COUNTY, UTAH

TEN POINT DRILLING PROGRAM

1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

2. **ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:**

Uinta	0' – 1,950'
Green River	1,950'
Wasatch	6,790'
Proposed TD	7,065'

3. **ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:**

Green River Formation (Oil) 1,950' – 6,790'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval	Date Sampled
Flow Rate	Temperature
Hardness	pH
Water Classification (State of Utah)	Dissolved Calcium (Ca) (mg/l)
Dissolved Iron (Fe) (ug/l)	Dissolved Sodium (Na) (mg/l)
Dissolved Magnesium (Mg) (mg/l)	Dissolved Carbonate (CO_3) (mg/l)
Dissolved Bicarbonate ($NaHCO_3$) (mg/l)	Dissolved Chloride (Cl) (mg/l)
Dissolved Sulfate (SO_4) (mg/l)	Dissolved Total Solids (TDS) (mg/l)

4. *PROPOSED CASING PROGRAM*

a. Casing Design: Meagher 12-21-4-2

Size	Interval		Weight	Grade	Coupling	Design Factors		
	Top	Bottom				Burst	Collapse	Tension
Surface casing 8-5/8"	0'	400'	24.0	J-55	STC	2,950 13.15	1,370 10.77	244,000 25.42
Prod casing 5-1/2"	0'	7,065'	15.5	J-55	LTC	4,810 2.14	4,040 1.80	217,000 1.98

Assumptions:
1) Surface casing max anticipated surface press (MASP) = Frac gradient – gas gradient
2) Prod casing MASP (production mode) = Pore pressure – gas gradient
3) All collapse calculations assume fully evacuated casing w/ gas gradient
4) All tension calculations assume air weight

Frac gradient at surface casing shoe =	13.0 ppg
Pore pressure at surface casing shoe =	8.33 ppg
Pore pressure at prod casing shoe =	8.33 ppg
Gas gradient =	0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: Meagher 12-21-4-2

Job	Fill	Description	Sacks ft^3	OH Excess*	Weight (ppg)	Yield (ft^3/sk)
Surface casing	400'	Class G w/ 2% CaCl	183 215	30%	15.8	1.17
Prod casing Lead	5,065'	Prem Lite II w/ 10% gel + 3% KCl	350 1141	30%	11.0	3.26
Prod casing Tail	2,000'	50/50 Poz w/ 2% gel + 3% KCl	363 451	30%	14.3	1.24

*Actual volume pumped will be 15% over the caliper log
- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

6. **TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:**

From surface to ±400 feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about ±400 feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

7. **AUXILIARY SAFETY EQUIPMENT TO BE USED:**

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

8. **TESTING, LOGGING AND CORING PROGRAMS:**

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 400' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated

'APIWellNo:43013504020000'

bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

10. **ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:**

It is anticipated that the drilling operations will commence the fourth quarter of 2010, and take approximately seven (7) days from spud to rig release.

'APIWellNo:43013504020000'

2-M SYSTEM

Blowout Prevention Equipment Systems

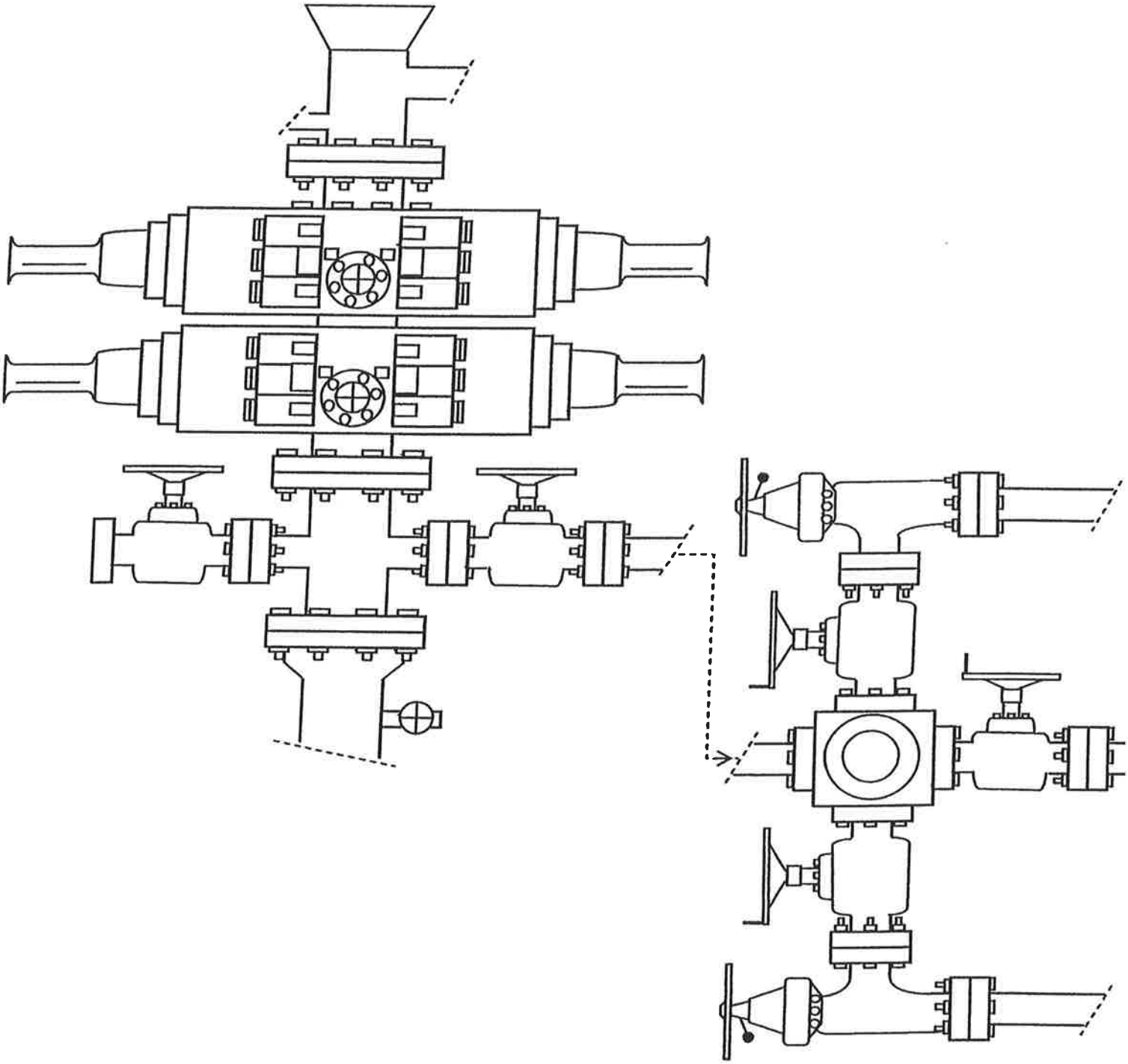
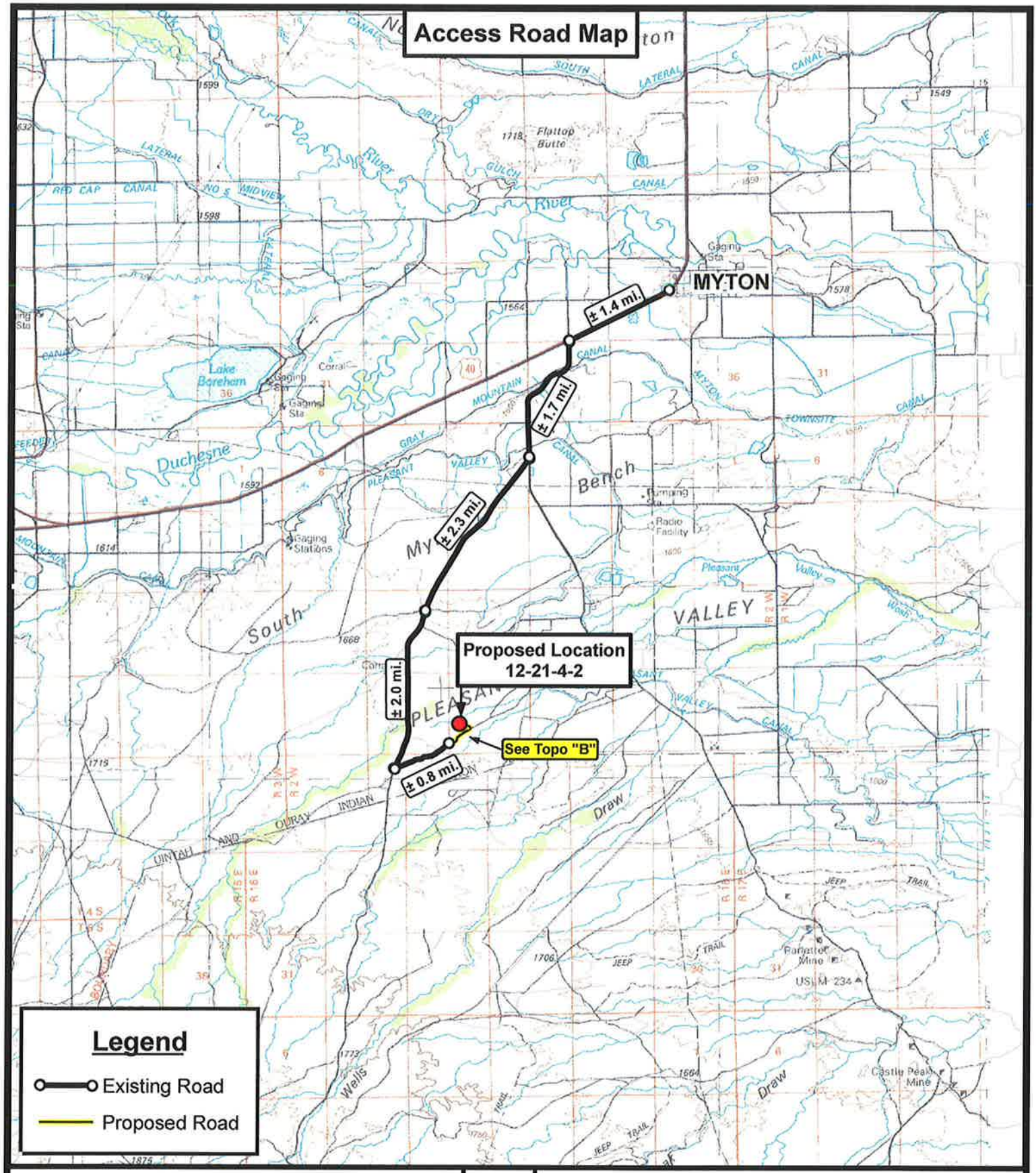


EXHIBIT C

'APIWellNo:43013504020000'



Tri State
Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518

N

NEWFIELD EXPLORATION COMPANY

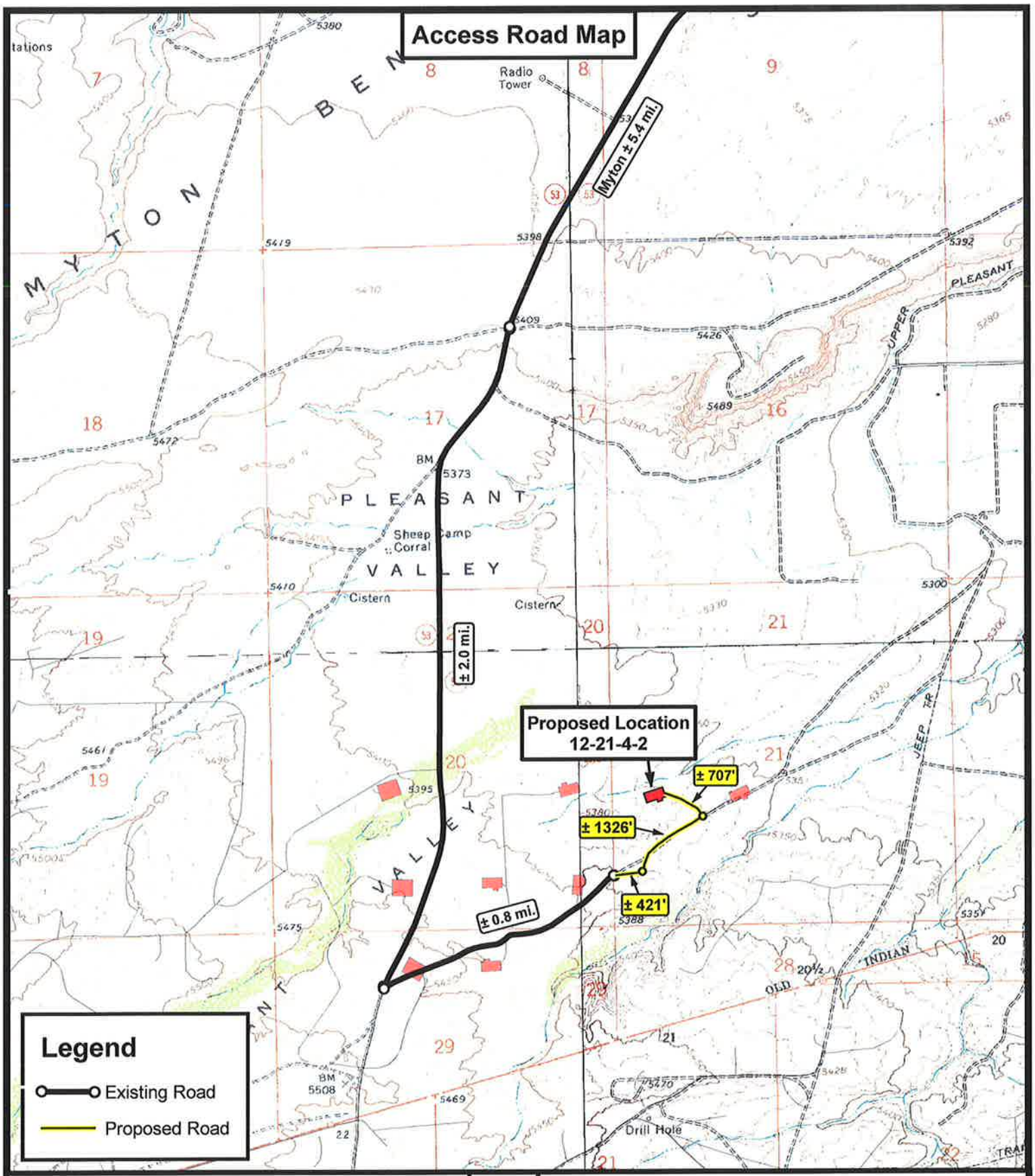
12-21-4-2
SEC. 21, T4S, R2W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY:	C.H.M.
DATE:	03-05-2010
SCALE:	1:100,000

TOPOGRAPHIC MAP

SHEET A

'APIWellNo:43013504020000'



Tri State Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518

DRAWN BY:	C.H.M.
DATE:	03-05-2010
SCALE:	1 "=2,000 '

N

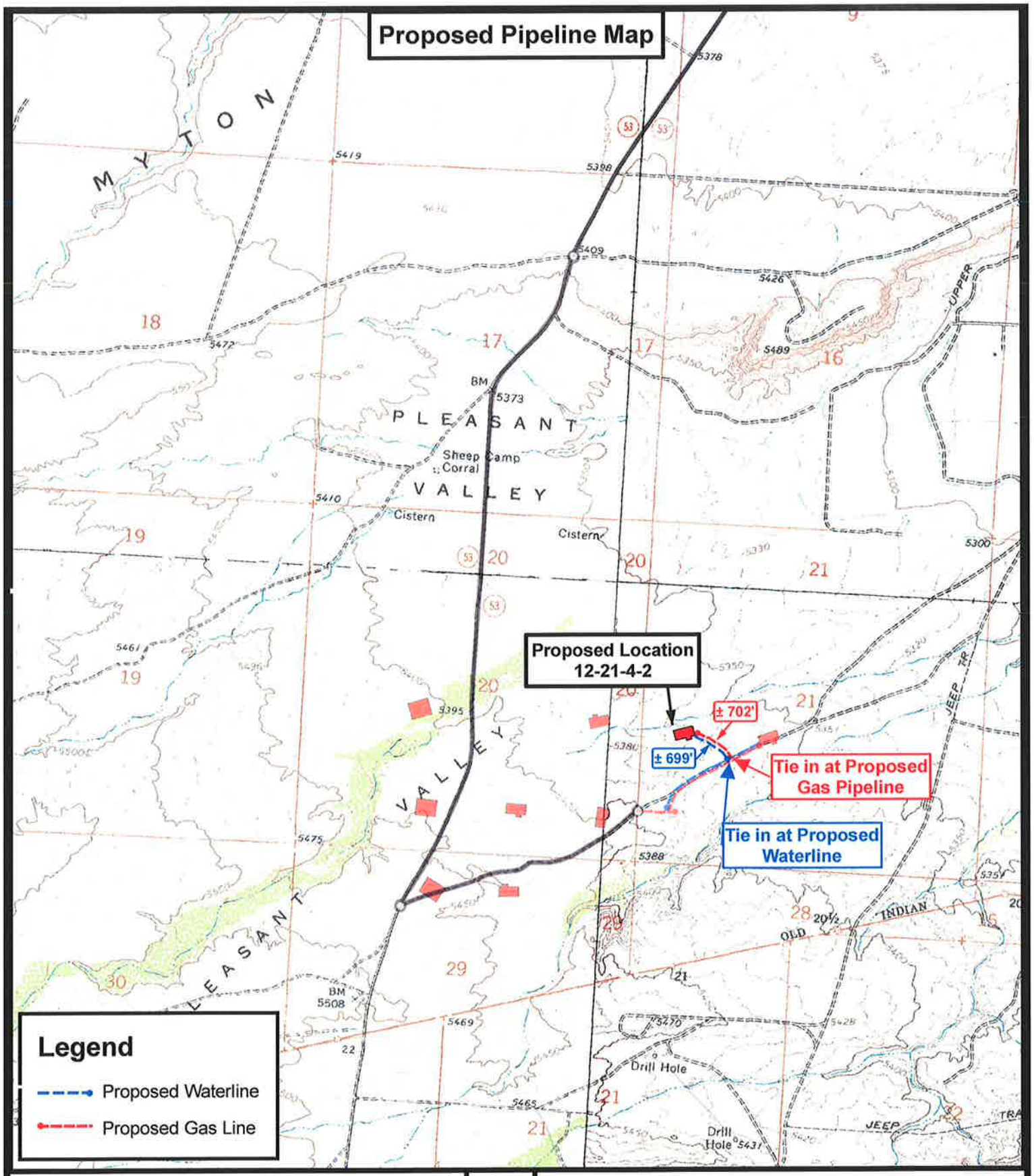
NEWFIELD EXPLORATION COMPANY

12-21-4-2
SEC. 21, T4S, R2W, U.S.B.&M.
Duchesne County, UT.

TOPOGRAPHIC MAP

SHEET B

'APIWellNo:43013504020000'



Tri State Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518

N

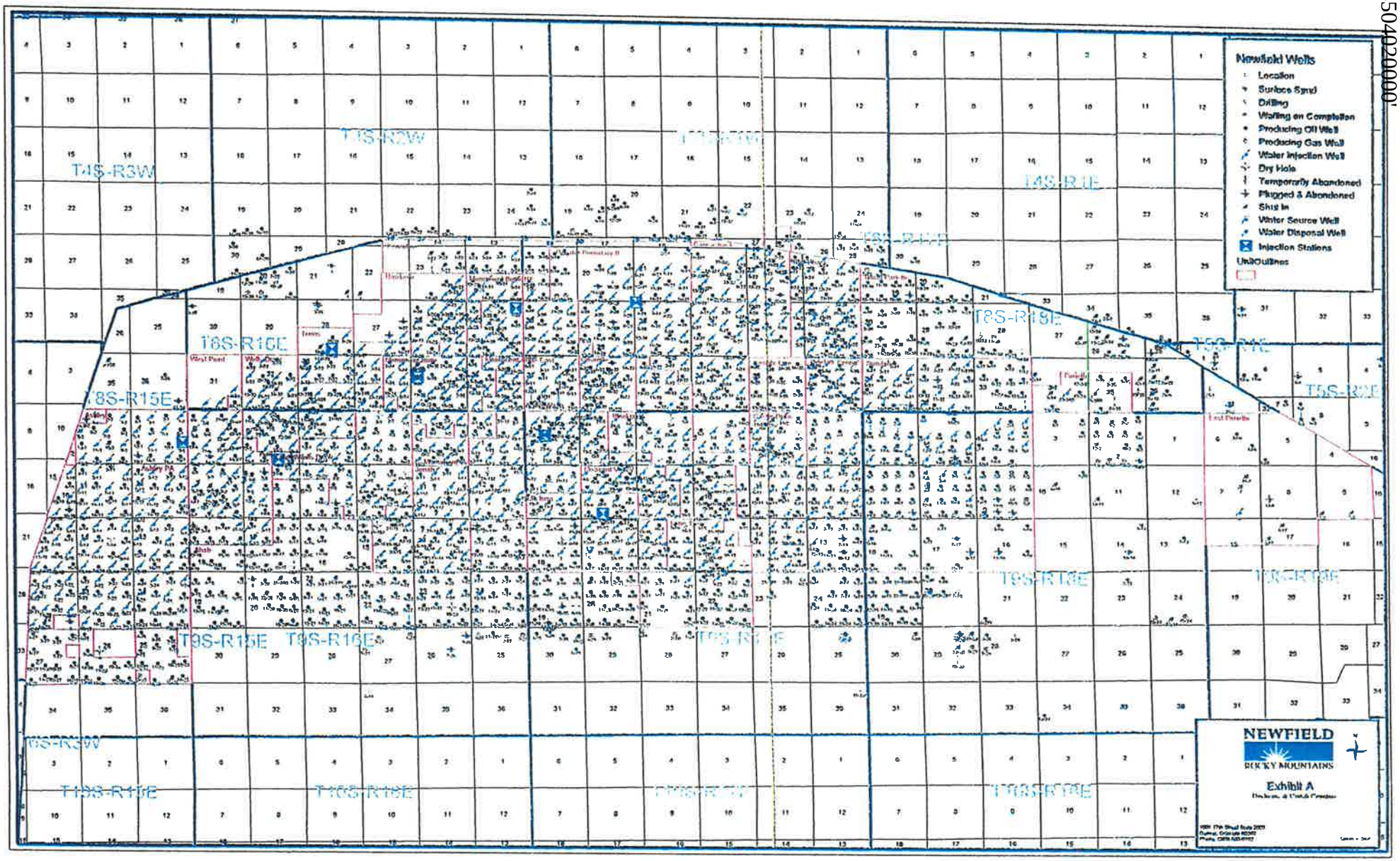
NEWFIELD EXPLORATION COMPANY

12-21-4-2
SEC. 21, T4S, R2W, U.S.B.&M.
Duchesne County, UT.

DRAWN BY:	C.H.M.
DATE:	03-05-2010
SCALE:	1 "=2,000 '

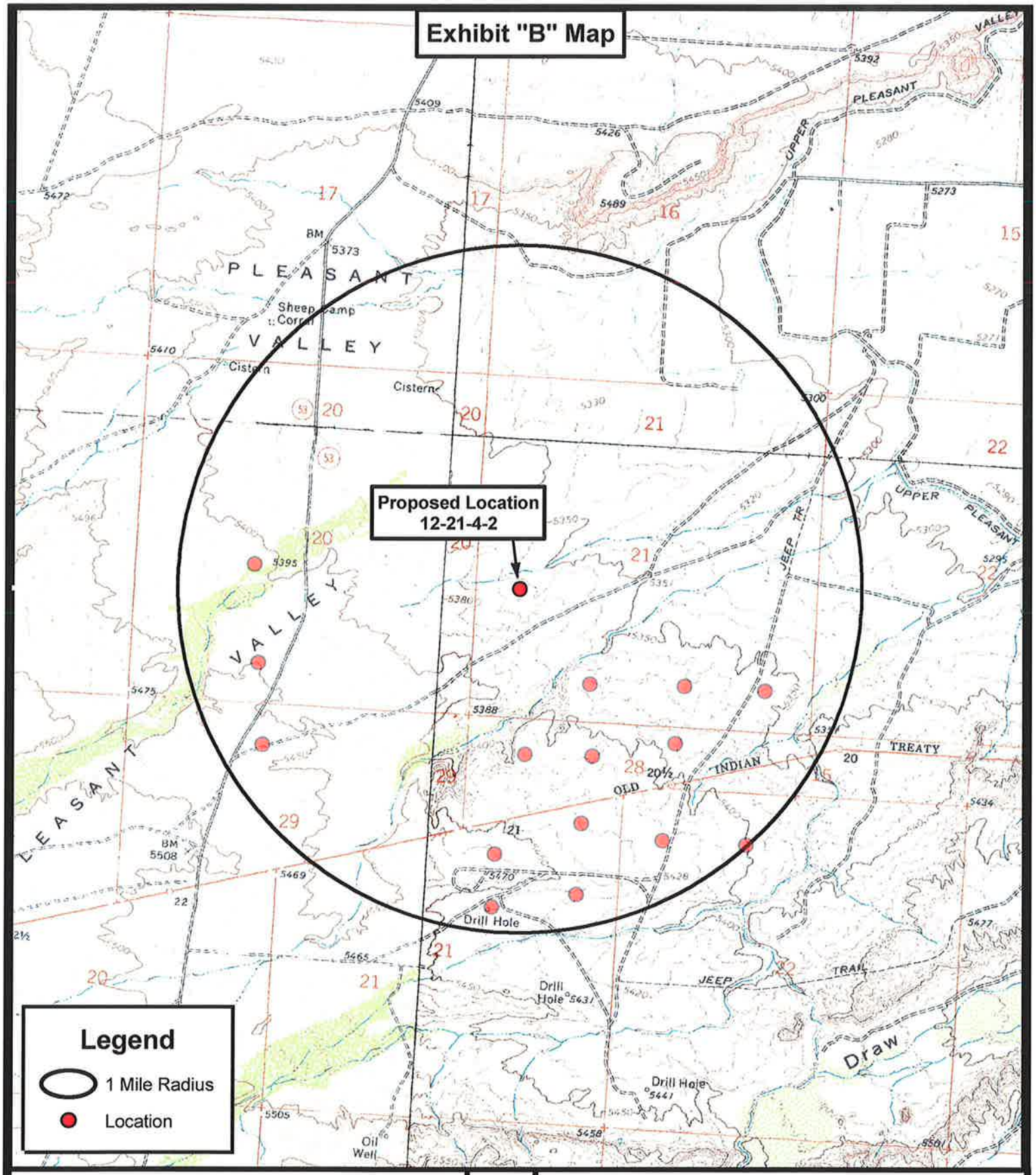
TOPOGRAPHIC MAP

SHEET C



'API Well No: 43013504020000'

'APIWellNo:43013504020000'



Tri State Land Surveying, Inc.
180 NORTH VERNAL AVE. VERNAL, UTAH 84078
P: (435) 781-2501
F: (435) 781-2518

N

NEWFIELD EXPLORATION COMPANY

12-21-4-2

SEC. 21, T4S, R2W, U.S.B.&M.

Duchesne County, UT.

DRAWN BY:	C.H.M.
DATE:	03-05-2010
SCALE:	1 "=2,000 '

TOPOGRAPHIC MAP

SHEET D

NEWFIELD PRODUCTION COMPANY
MEAGHER 12-21-4-2
NW/SW SECTION 21, T4S, R2W
DUCHESNE COUNTY, UTAH

THIRTEEN POINT SURFACE PROGRAM

1. **EXISTING ROADS**

See attached **Topographic Map "A"**

To reach Newfield Production Company well location site Meagher 12-21-4-2 located in the NW¼ SW¼ Section 21, T4S, R2W, S.L.B. & M., Duchesne County, Utah:

Proceed in a southwesterly direction out of Myton, approximately 1.4 miles to it's junction with an existing road to the south; proceed in a southwesterly direction approximately 6.0 miles to it's junction with an existing road to the northeast; proceed northeasterly approximately 0.8 miles to it's junction with the beginning of the proposed access road; proceed northeasterly along the proposed access road approximately 1,747'; turn and continue along the proposed access road in a northwesterly direction approximately 707' to the proposed well location.

The highways mentioned in the foregoing paragraph are bituminous surfaced roads to the point where Highway 216 exists to the South, thereafter the roads are constructed with existing materials and gravel. The highways are maintained by Utah State road crews. All other roads are maintained by County crews.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal.

2. **PLANNED ACCESS ROAD**

Approximately 2,454' of access road is proposed. See attached **Topographic Map "B"**.

The proposed access road will be an 18' crown road (9' either side of the centerline) with drainage ditches along either side of the proposed road whether it is deemed necessary in order to handle any run-off from normal meteorological conditions that are prevalent to this area. The maximum grade will be less than 8%.

There will be no culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

3. **LOCATION OF EXISTING WELLS**

Refer to **EXHIBIT B**.

4. **LOCATION OF EXISTING AND/OR PROPOSED FACILITIES**

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

5. **LOCATION AND TYPE OF WATER SUPPLY**

Newfield Production will transport water by truck for drilling purposes from the following water sources:

Johnson Water District
Water Right: 43-7478

Neil Moon Pond
Water Right: 43-11787

Newfield Collector Well
Water Right: 41-3530 (A30414DV, contracted with the Duchesne County Conservancy District).

There will be no water well drilled at this site

6. **SOURCE OF CONSTRUCTION MATERIALS**

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

7. **METHODS FOR HANDLING WASTE DISPOSAL**

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. A 16 mil liner with felt will be required. Newfield requests approval that a flare pit be constructed and utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

Immediately upon first production, all produced water will be confined to a steel storage tank. If the production water meets quality guidelines, it is transported to the Ashley, Monument Butte, Jonah, and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project.

Water not meeting quality criteria, is disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E) or at State of Utah approved surface disposal facilities.

8. **ANCILLARY FACILITIES:**

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

9. **WELL SITE LAYOUT:**

See attached Location Layout Sheet.

Fencing Requirements

All pits will be fenced according to the following minimum standards:

a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.

b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.

c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times

d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.

e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

10. **PLANS FOR RESTORATION OF SURFACE:**

a) **Producing Location**

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather

permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

b) **Dry Hole Abandoned Location**

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

11. **SURFACE OWNERSHIP:** A-M Inc., Emerald Phoenix Oil Company, and Dale Meagher. See the attached Memorandum of Surface Use Agreements.

12. **OTHER ADDITIONAL INFORMATION:**

Newfield Production Company requests 2,454' of planned access road to be granted. **Refer to Topographic Map "B".** Newfield Production Company requests 702' of surface gas line to be granted. Newfield Production Company requests 699' of buried water line to be granted.

It is proposed that the disturbed area will be 60' wide to allow for construction of the proposed access road, a 10" or smaller gas gathering line, a 3" poly fuel gas line, a buried 3" steel water injection line and a buried 3" poly water return line. The planned access road will consist of a 18' permanent running surface (9' either side of the centerline) crowned and ditched in order to handle any run-off from any precipitation events that are prevalent to this area. The maximum grade will be less than 8%. There will be no culverts required along this access road. There will be turnouts as needed along this road to allow for increases in potential traffic issues. There are no fences encountered along this proposed road. There will be no new gates or cattle guards required. All construction material for this access road will be borrowed material accumulated during construction of the access road.

Both the proposed surface gas and buried water lines will tie in to the existing pipeline infrastructure. **Refer to Topographic Map "C."** The proposed water pipelines will be buried in a 4-5' deep trench constructed with a trencher or backhoe for the length of the proposal. The equipment will run on the surface and not be flat bladed to minimize surface impacts to precious topsoil in these High Desert environments. If possible, all proposed surface gas pipelines will be installed on the same side of the road as existing gas lines. The construction phase of the planned access road, proposed gas lines and proposed water lines will last approximately (5) days.

In the event that the proposed well is converted to a water injection well, a Sundry Notice form will be applied for through the State of Utah DOGM.

a) Newfield Production Company is responsible for informing all persons in the area who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, Newfield is to immediately stop work that might further disturb such materials and contact the Authorized Officer.

b) Newfield Production will control noxious weeds along rights-of-way for roads, pipelines, well sites or other applicable facilities. On State administered land it is required that a Pesticide Use Proposal shall be submitted and given approval prior to the application of herbicides or other possible hazardous chemicals.

c) Drilling rigs and/or equipment used during drilling operations on this well site will not be stacked or stored on State Lands after the conclusion of drilling operations or at any other

time without State authorization. However, if State authorization is obtained, it is only a temporary measure to allow time to make arrangements for permanent storage on commercial facilities.

Additional Surface Stipulations

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

Hazardous Material Declaration

Newfield Production Company guarantees that during the drilling and completion of the Meagher 12-21-4-2, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the Meagher 12-21-4-2 Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

The State office shall be notified upon site completion prior to moving on the drilling rig.

13. **LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:**

Representative

Name:	Tim Eaton
Address:	Newfield Production Company Route 3, Box 3630 Myton, UT 84052
Telephone:	(435) 646-3721

Certification

Please be advised that Newfield Production Company is considered to be the operator of well #12-21-4-2, NW/SW Section 21, T4S, R2W, Duchesne County, Utah and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by Bond #B001834.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company 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 the 18 U.S.C. 1001 for the filing of a false statement.

6/22/10
Date

Mandie Crozier
Regulatory Specialist
Newfield Production Company

'APIWellNo:43013504020000'

2-M SYSTEM

Blowout Prevention Equipment Systems

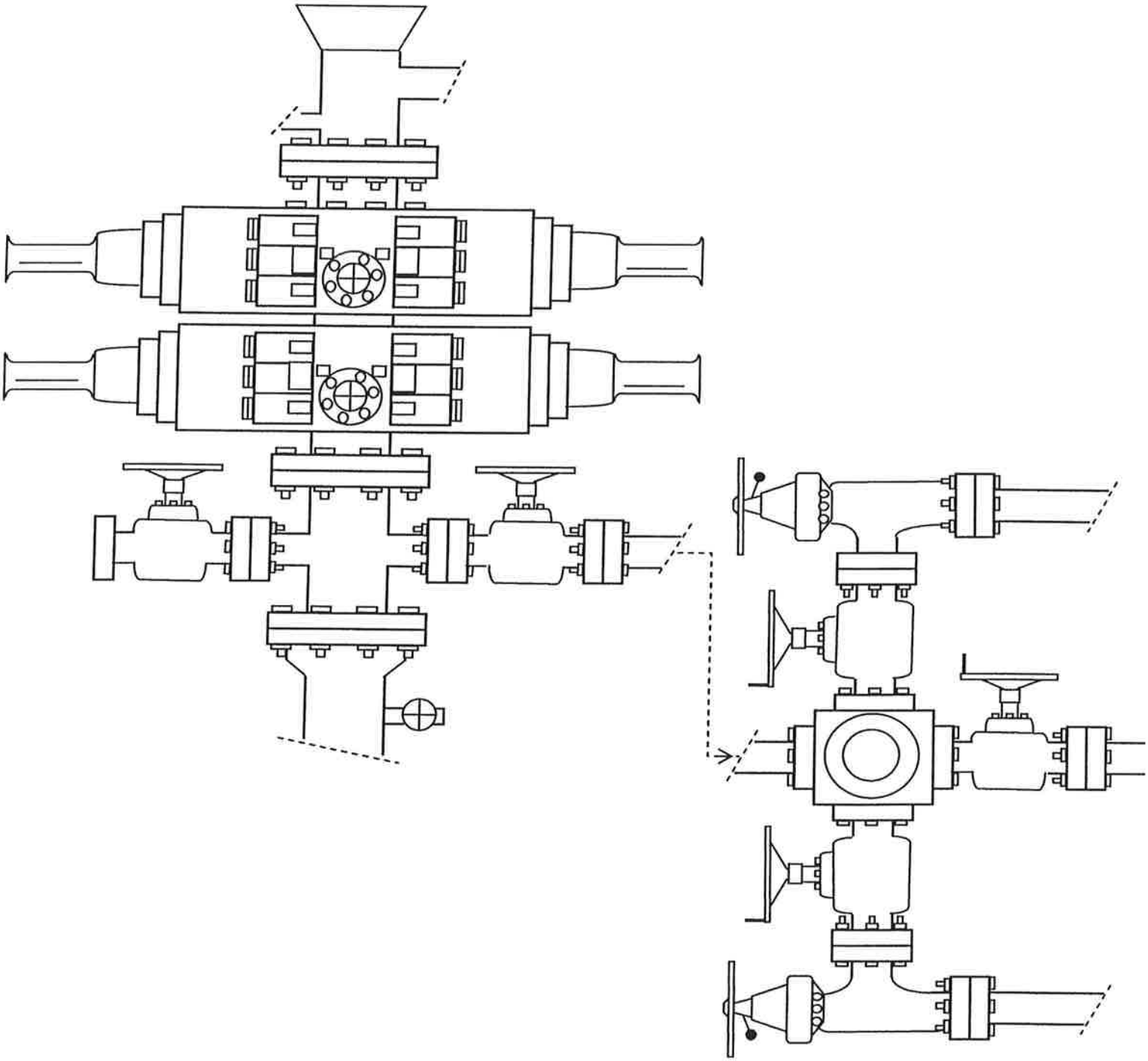
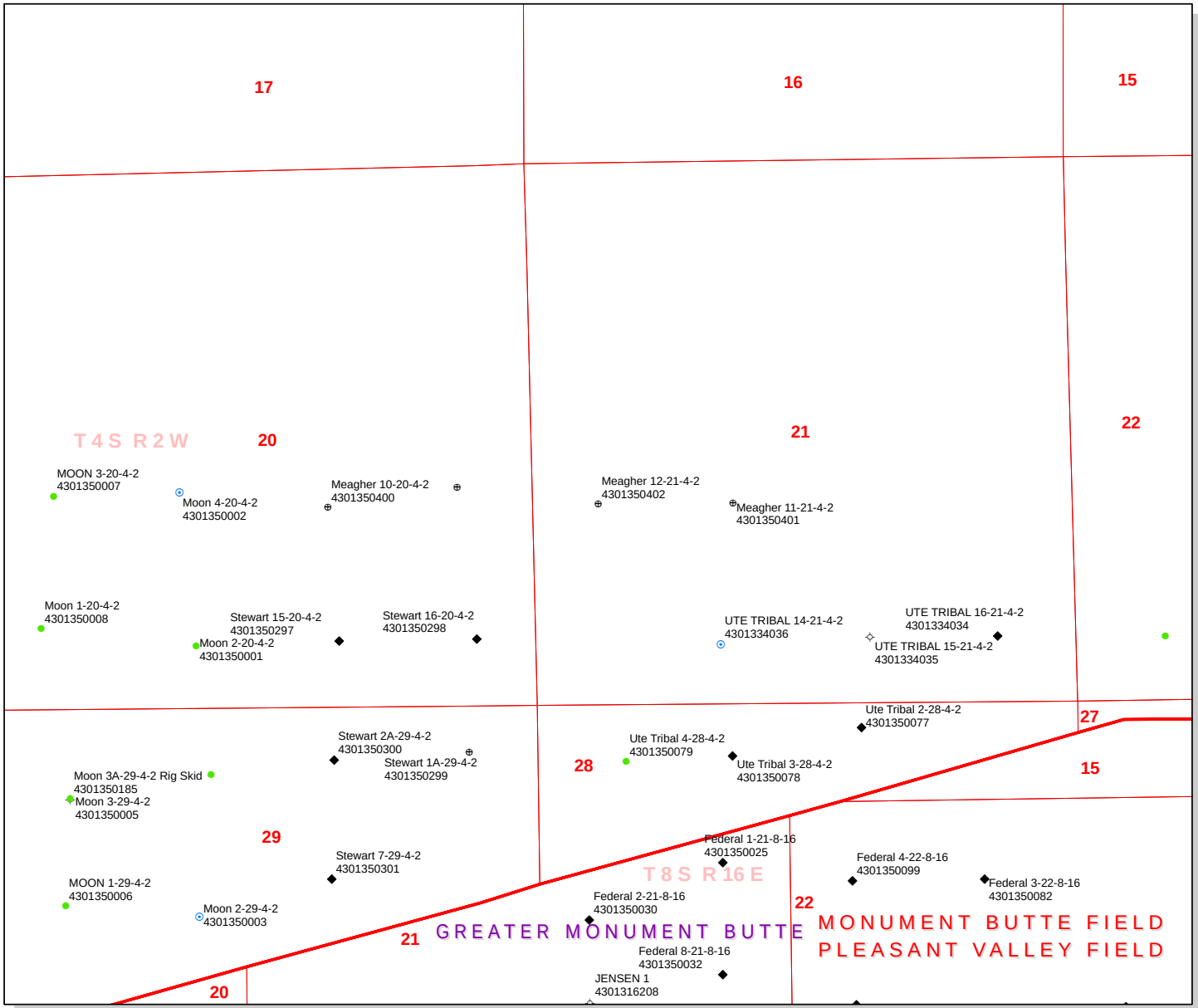


EXHIBIT C

'APIWellNo:43013504020000'



API Number: 4301350402

Well Name: Meagher 12-21-4-2

Township 04.0 S Range 02.0 W Section 21

Meridian: UBM

Operator: NEWFIELD PRODUCTION COMPANY

Map Prepared:
Map Produced by Diana Mason

Units
STATUS
- ACTIVE
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Fields
- Sections
- Township

Wells Query
- <all other values>

Status
- APD - Aproved Permit
- DRL - Spuded (Drilling Commenced)
- GIW - Gas Injection
- GS - Gas Storage
- LA - Location Abandoned
- LOC - New Location
- OPS - Operation Suspended
- PA - Plugged Abandoned
- PGW - Producing Gas Well
- POW - Producing Oil Well
- RET - Returned APD
- SGW - Shut-in Gas Well
- SOW - Shut-in Oil Well
- TA - Temp. Abandoned
- TW - Test Well
- WDW - Water Disposal
- WIW - Water Injection Well
- WSW - Water Supply Well

N

1,250 625 0 1,250 Feet

1:12,089

BOPE REVIEW NEWFIELD PRODUCTION COMPANY Meagher 12-21-4-2 43013504020000

Well Name	NEWFIELD PRODUCTION COMPANY Meagher 12-21-4-2 430135040200(			
String	Surf	Prod		
Casing Size(")	8.625	5.500		
Setting Depth (TVD)	400	7065		
Previous Shoe Setting Depth (TVD)	0	400		
Max Mud Weight (ppg)	8.3	8.3		
BOPE Proposed (psi)	500	2000		
Casing Internal Yield (psi)	2950	4810		
Operators Max Anticipated Pressure (psi)	3038	8.3		

Calculations	Surf String	8.625	"	
Max BHP (psi)	.052*Setting Depth*MW=	173		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	125	YES	air drill
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	85	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	85	NO	OK
Required Casing/BOPE Test Pressure=		400	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		0	psi	*Assumes 1psi/ft frac gradient

Calculations	Prod String	5.500	"	
Max BHP (psi)	.052*Setting Depth*MW=	3049		
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=	2201	NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=	1495	YES	OK
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=	1583	NO	Reasonable for area
Required Casing/BOPE Test Pressure=		2000	psi	
*Max Pressure Allowed @ Previous Casing Shoe=		400	psi	*Assumes 1psi/ft frac gradient

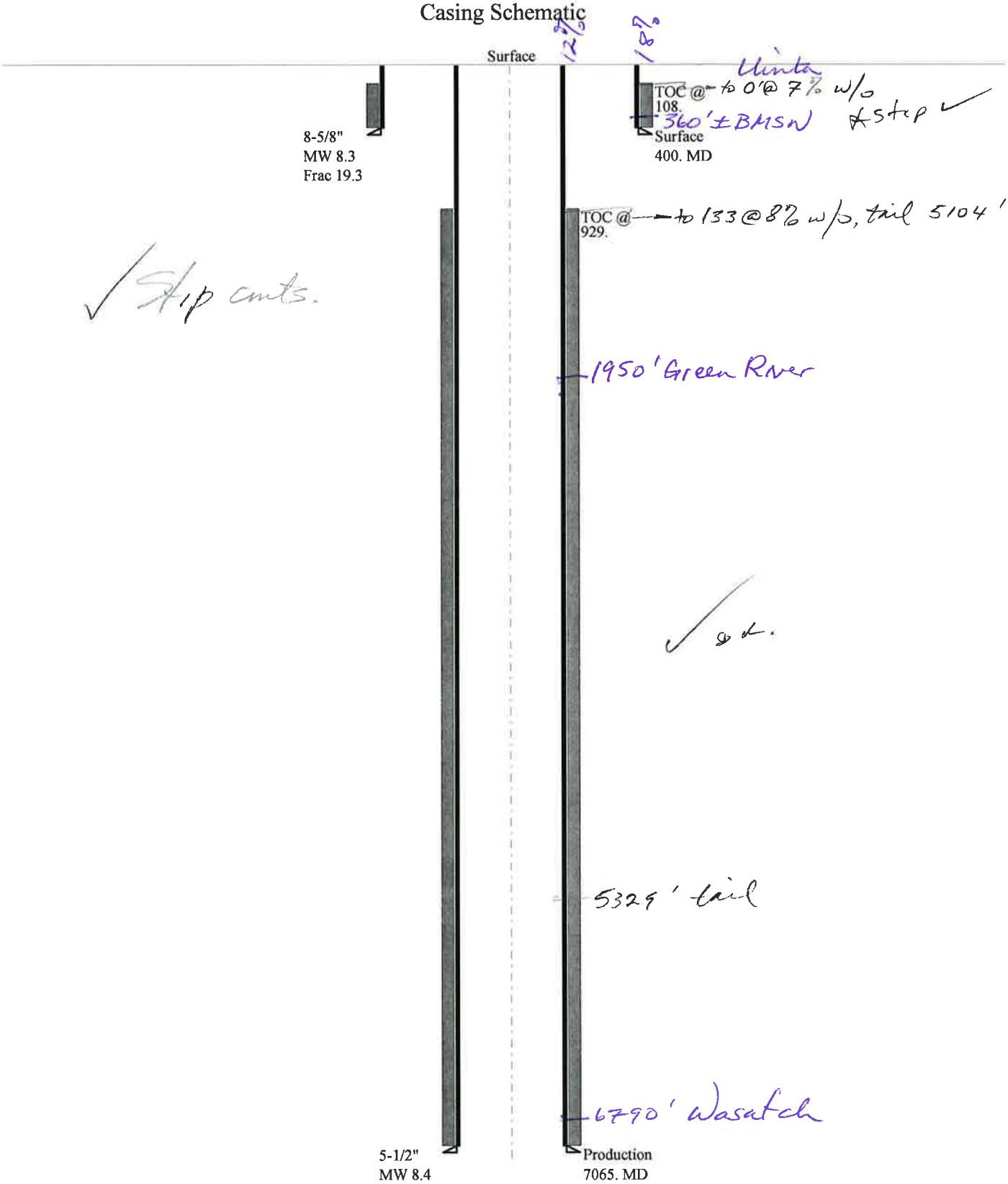
Calculations	String		"	
Max BHP (psi)	.052*Setting Depth*MW=			
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO	
Required Casing/BOPE Test Pressure=			psi	
*Max Pressure Allowed @ Previous Casing Shoe=			psi	*Assumes 1psi/ft frac gradient

Calculations	String		"	
Max BHP (psi)	.052*Setting Depth*MW=			
			BOPE Adequate For Drilling And Setting Casing at Depth?	
MASP (Gas) (psi)	Max BHP-(0.12*Setting Depth)=		NO	
MASP (Gas/Mud) (psi)	Max BHP-(0.22*Setting Depth)=		NO	
			*Can Full Expected Pressure Be Held At Previous Shoe?	
Pressure At Previous Shoe	Max BHP-.22*(Setting Depth - Previous Shoe Depth)=		NO	
Required Casing/BOPE Test Pressure=			psi	
*Max Pressure Allowed @ Previous Casing Shoe=			psi	*Assumes 1psi/ft frac gradient

'APIWellNo:43013504020000'

43013504020000 Meagher 12-21-4-2

Casing Schematic



'APIWellNo:43013504020000'

Well name:	**43013504020000 Meagher 12-21-4-2**
Operator:	**NEWFIELD PRODUCTION COMPANY**
String type:	Surface
Project ID:	43-013-50402
Location:	DUCHESNE COUNTY

Design parameters:

Collapse

Mud weight: 8.330 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 352 psi

Internal gradient: 0.120 psi/ft

Calculated BHP 400 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.70 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.50 (B)

Tension is based on air weight.

Neutral point: 350 ft

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 80 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 100 ft

Cement top: 108 ft

Non-directional string.

Re subsequent strings:

Next setting depth: 7,065 ft

Next mud weight: 8.400 ppg

Next setting BHP: 3,083 psi

Fracture mud wt: 19.250 ppg

Fracture depth: 400 ft

Injection pressure: 400 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	400	8.625	24.00	J-55	ST&C	400	400	7.972	2059

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	173	1370	7.917	400	2950	7.38	9.6	244	25.42 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: July 20,2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 400 ft, a mud weight of 8.33 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

'APIWellNo:43013504020000'

Well name:	**43013504020000 Meagher 12-21-4-2**
Operator:	**NEWFIELD PRODUCTION COMPANY**
String type:	Production
Project ID:	43-013-50402
Location:	DUCHESNE COUNTY

Design parameters:

Collapse

Mud weight: 8.400 ppg

Design is based on evacuated pipe.

Burst

Max anticipated surface pressure: 1,529 psi

Internal gradient: 0.220 psi/ft

Calculated BHP 3,083 psi

No backup mud specified.

Minimum design factors:

Collapse:

Design factor 1.125

Burst:

Design factor 1.00

Tension:

8 Round STC: 1.80 (J)

8 Round LTC: 1.80 (J)

Buttress: 1.60 (J)

Premium: 1.50 (J)

Body yield: 1.60 (B)

Tension is based on air weight.

Neutral point: 6,167 ft

Environment:

H2S considered? No

Surface temperature: 74 °F

Bottom hole temperature: 173 °F

Temperature gradient: 1.40 °F/100ft

Minimum section length: 100 ft

Cement top: 929 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Est. Cost ($)
1	7065	5.5	15.50	J-55	LT&C	7065	7065	4.825	24947

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (kips)	Tension Strength (kips)	Tension Design Factor
1	3083	4040	1.310	3083	4810	1.56	109.5	217	1.98 J

Prepared by: Helen Sadik-Macdonald
Div of Oil,Gas & Mining
Phone: 801 538-5357
FAX: 801-359-3940

Date: July 20,2010
Salt Lake City, Utah

Remarks:

Collapse is based on a vertical depth of 7065 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes.
Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

ON-SITE PREDRILL EVALUATION
Utah Division of Oil, Gas and Mining

Operator NEWFIELD PRODUCTION COMPANY
Well Name Meagher 12-21-4-2
API Number 43013504020000 **APD No** 2729 **Field/Unit** UNDESIGNATED
Location: 1/4,1/4 NWSW **Sec** 21 **Tw** 4.0S **Rng** 2.0W 1982 FSL 658 FWL
GPS Coord (UTM) **Surface Owner** Emerald Phoenix Oil Company

Participants

Floyd Bartlett (DOGM), Tim Eaton (Newfield Production).

Regional/Local Setting & Topography

The general area is approximately 8.2 road miles southwest of Myton, Duchesne County, UT in the middle Pleasant Valley Wash area. Pleasant Valley Wash is an ephemeral drainage, which joins the Pariette Draw drainage. The drainage shows no signs of recent significant flows. Pariette Draw runs into the Green River approximately 6 miles downstream from Ouray, Utah and about 11 miles downstream from the location. The area is above the agricultural lands of Pleasant Valley. Broad flats intersected by swales with gentle to moderate side slopes characterize topography. Access is by State, County and existing or planned oil field development roads. Approximately 2460 of new construction extending across private land will be required to reach the location.

The proposed Meagher 12-21-4-2 oil well location is on a flat with a slight slope to the north. A swale is located to the southeast which will not be affected. Also a swale exists to the north which runs to the northeast. Maximum excavation is a cut of 4.1 feet at Reserve Pit Corner C 3. No springs, streams, seeps or ponds are known to exist in the immediate area. The selected site appears to be a good location for constructing a pad, drilling and operating a well.

Three heirs of the M.J. Meagher estate own both the minerals and the surface.

Surface Use Plan

Current Surface Use
Wildlfe Habitat

New Road Miles	Well Pad	Src Const Material	Surface Formation
0.49	**Width** 204 **Length** 305	Onsite	UNTA

Ancillary Facilities N

Waste Management Plan Adequate?

Environmental Parameters

Affected Floodplains and/or Wetlands N

Flora / Fauna

Vegetation on the area is a desert shrub type. Vegetation includes yucca, halogeton, horsebrush, rabbit brush, mustard, broom snakeweed, cheatgrass, Indian ricegrass, globe mallow, shadscale, mat saltbrush, bud sage, curly mesquite, squirrel tail, winter fat and spring annuals.

Antelope, deer, prairie dogs, small mammals and birds. A burrowing owl was seen in the general area.

Soil Type and Characteristics

Deep sandy loam.

Erosion Issues N

Sedimentation Issues N

Site Stability Issues N

Drainage Diverson Required? N

Berm Required? Y

Erosion Sedimentation Control Required? N

Paleo Survey Run? N **Paleo Potental Observed?** N **Cultural Survey Run?** N **Cultural Resources?**

Reserve Pit

Site-Specific Factors		Site Ranking	
Distance to Groundwater (feet)	100 to 200	5	
Distance to Surface Water (feet)	>1000	0	
Dist. Nearest Municipal Well (ft)	>5280	0	
Distance to Other Wells (feet)	300 to 1320	10	
Native Soil Type	Mod permeability	10	
Fluid Type	Fresh Water	5	
Drill Cuttings	Normal Rock	0	
Annual Precipitation (inches)		0	
Affected Populations			
Presence Nearby Utility Conduits	Not Present	0	
	Final Score	30	1 Sensitivity Level

Characteristics / Requirements

A reserve pit 40’ x 80’ x 8’ deep will be dug in the southeast corner of the location. A 10’ outer bench is provided. The pit will be lined with a 16-mil liner and a sub-liner to cushion the liner as needed.

Closed Loop Mud Required? N **Liner Required?** Y **Liner Thickness** 16 **Pit Underlayment Required?** Y

Other Observations / Comments

Floyd Bartlett	6/28/2010
Evaluator	**Date / Time**

Application for Permit to Drill
Statement of Basis

Utah Division of Oil, Gas and Mining

APD No	API WellNo	Status	Well Type	Surf Owner	CBM
2729	43013504020000	LOCKED	OW	P	No

Operator	NEWFIELD PRODUCTION COMPANY	**Surface Owner-APD**	Emerald Phoenix Oil Company
Well Name	Meagher 12-21-4-2	**Unit**	
Field	UNDESIGNATED	**Type of Work**	DRILL

Location NWSW 21 4S 2W U 1982 FSL 658 FWL GPS Coord (UTM) 574923E 4441084N

Geologic Statement of Basis

Newfield proposes to set 400' of surface casing at this location. The depth to the base of the moderately saline water at this location is estimated to be at a depth of 360'. A search of Division of Water Rights records shows no water wells within a 10,000 foot radius of the proposed location. The surface formation at this site is the Uinta Formation. The Uinta Formation is made up of interbedded shales and sandstones. The sandstones are mostly lenticular and discontinuous and should not be a significant source of useable ground water. The proposed casing and cement should adequately protect ground water in this area.

Brad Hill	7/6/2010
APD Evaluator	**Date / Time**

Surface Statement of Basis

The general area is approximately 8.2 road miles southwest of Myton, Duchesne County, UT in the middle Pleasant Valley Wash area. Pleasant Valley Wash is an ephemeral drainage, which joins the Pariette Draw drainage. The drainage shows no signs of recent significant flows. Pariette Draw runs into the Green River approximately 6 miles downstream from Ouray, Utah and about 11 miles downstream from the location. The area is above the agricultural lands of Pleasant Valley. Broad flats intersected by swales with gentle to moderate side slopes characterize topography. Access is by State, County and existing or planned oil field development roads. Approximately 2460 of new construction extending across private land will be required to reach the location.

The proposed Meagher 12-21-4-2 oil well location is on a flat with a slight slope to the north. A swale is located to the southeast which will not be affected. Also a swale exists to the north which runs to the northeast. Maximum excavation is a cut of 4.1 feet at Reserve Pit Corner C 3. No springs, streams, seeps or ponds are known to exist in the immediate area. The selected site appears to be a good location for constructing a pad, drilling and operating a well.

Three heirs of the M.J. Meagher estate own both the minerals and the surface. Phone contact was made with Ms. Dale Meagher and Samuel Arentz (A-M INC) to invite them to the pre-site visit. Neither desired to attend. Mr. Samuel Arentz also stated that there was no need to contact Mr. .Jim Ivers III of Emerald Phoenix Oil Corp., as he would not desire to attend. Signed landowner agreements exist with all surface owners.

Floyd Bartlett	6/28/2010
Onsite Evaluator	**Date / Time**

Conditions of Approval / Application for Permit to Drill

Category	Condition
Pits	A synthetic liner with a minimum thickness of 16 mils with a felt subliner shall be properly installed and maintained in the reserve pit.
Surface	The well site shall be bermed to prevent fluids from leaving the pad.
Surface	The reserve pit shall be fenced upon completion of drilling operations.

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 6/22/2010 **API NO. ASSIGNED:** 43013504020000
WELL NAME: Meagher 12-21-4-2
OPERATOR: NEWFIELD PRODUCTION COMPANY (N2695) **PHONE NUMBER:** 435 646-4825
CONTACT: Mandie Crozier

PROPOSED LOCATION: NWSW 21 040S 020W **Permit Tech Review:** ✔

SURFACE: 1982 FSL 0658 FWL **Engineering Review:** ✔

BOTTOM: 1982 FSL 0658 FWL **Geology Review:** ✔

COUNTY: DUCHESNE
LATITUDE: 40.11863 **LONGITUDE:** -110.12077
UTM SURF EASTINGS: 574923.00 **NORTHINGS:** 4441084.00
FIELD NAME: UNDESIGNATED
LEASE TYPE: 4 - Fee
LEASE NUMBER: FEE **PROPOSED PRODUCING FORMATION(S):** GREEN RIVER
SURFACE OWNER: 4 - Fee **COALBED METHANE:** NO

RECEIVED AND/OR REVIEWED:

- ✔ **PLAT**
- ✔ **Bond:** STATE/FEE - B001834
- ☐ **Potash**
- ☐ **Oil Shale 190-5**
- ☐ **Oil Shale 190-3**
- ☐ **Oil Shale 190-13**
- ✔ **Water Permit:** 437478
- ☐ **RDCC Review:**
- ✔ **Fee Surface Agreement**
- ☐ **Intent to Commingle**

Commingling Approved

LOCATION AND SITING:

- ☐ **R649-2-3.**

Unit:

- ☐ **R649-3-2. General**
- ☐ **R649-3-3. Exception**
- ✔ **Drilling Unit**

Board Cause No: R649-3-2
Effective Date:
Siting:

- ☐ **R649-3-11. Directional Drill**

Comments: Presite Completed

Stipulations:
5 - Statement of Basis - bhill
23 - Spacing - dmason
25 - Surface Casing - ddoucet

GARY R. HERBERT
Governor
GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES
MICHAEL R. STYLER
Executive Director
Division of Oil, Gas and Mining
JOHN R. BAZA
Division Director

Permit To Drill
****

Well Name: Meagher 12-21-4-2
API Well Number: 43013504020000
Lease Number: FEE
Surface Owner: FEE (PRIVATE)
Approval Date: 7/22/2010

Issued to:
NEWFIELD PRODUCTION COMPANY , Rt 3 Box 3630 , Myton, UT 84052

Authority:
Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-2. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

Duration:
This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

General:
Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

Conditions of Approval:
This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

Compliance with the Conditions of Approval/Application for Permit to Drill outlined in the Statement of Basis (copy attached).

Surface casing shall be cemented to the surface.

Additional Approvals:
The operator is required to obtain approval from the Division of Oil, Gas and mining before performing any of the following actions during the drilling of this well:

- Any changes to the approved drilling plan – contact Dustin Doucet
- Significant plug back of the well – contact Dustin Doucet
- Plug and abandonment of the well – contact Dustin Doucet

Notification Requirements:
The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well – contact Carol Daniels
  OR
  submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov
- 24 hours prior to testing blowout prevention equipment - contact Dan Jarvis
- 24 hours prior to cementing or testing casing – contact Dan Jarvis
- Within 24 hours of making any emergency changes to the approved drilling program – contact Dustin Doucet
- 24 hours prior to commencing operations to plug and abandon the well – contact Dan Jarvis

Contact Information:
The following are Division of Oil, Gas and Mining contacts and their telephone numbers (please leave a voicemail message if the person is not available to take the call):

- Carol Daniels 801-538-5284 - office
- Dustin Doucet 801-538-5281 - office
  801-733-0983 - after office hours
- Dan Jarvis 801-538-5338 - office
  801-231-8956 - after office hours

Reporting Requirements:
All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) – due within 5 days of spudding the well
- Monthly Status Report (Form 9) – due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) – due prior to implementation
- Written Notice of Emergency Changes (Form 9) – due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) – due prior to implementation
- Report of Water Encountered (Form 7) – due within 30 days after completion
- Well Completion Report (Form 8) – due within 30 days after completion or plugging

Approved By:

Acting Associate Director, Oil & Gas

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: FEE

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL
Oil Well

8. WELL NAME and NUMBER:
MEAGHER 12-21-4-2

2. NAME OF OPERATOR:
NEWFIELD PRODUCTION COMPANY

9. API NUMBER:
43013504020000

3. ADDRESS OF OPERATOR:
Rt 3 Box 3630 , Myton, UT, 84052

PHONE NUMBER:
435 646-4825 Ext

9. FIELD and POOL or WILDCAT:
UNDESIGNATED

4. LOCATION OF WELL
FOOTAGES AT SURFACE:
1982 FSL 0658 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN:
Qtr/Qtr: NWSW Section: 21 Township: 04.0S Range: 02.0W Meridian: U

COUNTY:
DUCHESNE

STATE:
UTAH

11.
CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 7/22/2011	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Newfield proposes to extend the Application for Permit to Drill this well for one year.

Approved by the Utah Division of Oil, Gas and Mining

Date: 07/12/2011

By:

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Mandie Crozier	435 646-4825	Regulatory Tech

SIGNATURE	DATE
N/A	7/12/2011

RECEIVED Jul. 12, 2011

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43013504020000

API: 43013504020000
Well Name: MEAGHER 12-21-4-2
Location: 1982 FSL 0658 FWL QTR NWSW SEC 21 TWNP 040S RNG 020W MER U
Company Permit Issued to: NEWFIELD PRODUCTION COMPANY
Date Original Permit Issued: 7/22/2010

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision. Following is a checklist of some items related to the application, which should be verified.

- **If located on private land, has the ownership changed, if so, has the surface agreement been updated?** ○ **Yes** ◉ **No**
- **Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location?** ○ **Yes** ◉ **No**
- **Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well?** ○ **Yes** ◉ **No**
- **Have there been any changes to the access route including ownership, or rightof- way, which could affect the proposed location?** ○ **Yes** ◉ **No**
- **Has the approved source of water for drilling changed?** ○ **Yes** ◉ **No**
- **Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation?** ○ **Yes** ◉ **No**
- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Mandie Crozier **Date:** 7/12/2011
Title: Regulatory Tech **Representing:** NEWFIELD PRODUCTION COMPANY

RECEIVED Jul. 12, 2011

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

FORM 9

5.LEASE DESIGNATION AND SERIAL NUMBER: FEE

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

6. IF INDIAN, ALLOTTEE OR TRIBE NAME:

7.UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: Oil Well

8. WELL NAME and NUMBER: MEAGHER 12-21-4-2

2. NAME OF OPERATOR: NEWFIELD PRODUCTION COMPANY

9. API NUMBER: 43013504020000

3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT, 84052
PHONE NUMBER: 435 646-4825 Ext

9. FIELD and POOL or WILDCAT: SOUTH MYTON BENCH

4. LOCATION OF WELL
FOOTAGES AT SURFACE: 1982 FSL 0658 FWL
QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 21 Township: 04.0S Range: 02.0W Meridian: U

COUNTY: DUCHESNE

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
✓ NOTICE OF INTENT Approximate date work will start: 7/22/2012	☐ ACIDIZE	☐ ALTER CASING	☐ CASING REPAIR
	☐ CHANGE TO PREVIOUS PLANS	☐ CHANGE TUBING	☐ CHANGE WELL NAME
	☐ CHANGE WELL STATUS	☐ COMMINGLE PRODUCING FORMATIONS	☐ CONVERT WELL TYPE
☐ SUBSEQUENT REPORT Date of Work Completion:	☐ DEEPEN	☐ FRACTURE TREAT	☐ NEW CONSTRUCTION
	☐ OPERATOR CHANGE	☐ PLUG AND ABANDON	☐ PLUG BACK
	☐ PRODUCTION START OR RESUME	☐ RECLAMATION OF WELL SITE	☐ RECOMPLETE DIFFERENT FORMATION
☐ SPUD REPORT Date of Spud:	☐ REPERFORATE CURRENT FORMATION	☐ SIDETRACK TO REPAIR WELL	☐ TEMPORARY ABANDON
	☐ TUBING REPAIR	☐ VENT OR FLARE	☐ WATER DISPOSAL
☐ DRILLING REPORT Report Date:	☐ WATER SHUTOFF	☐ SI TA STATUS EXTENSION	✓ APD EXTENSION
	☐ WILDCAT WELL DETERMINATION	☐ OTHER	OTHER:

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

Newfield proposes to extend the Application for Permit to Drill this well for one year.

Approved by the Utah Division of Oil, Gas and Mining

Date: July 11, 2012

By: [signature]

NAME (PLEASE PRINT)	PHONE NUMBER	TITLE
Mandie Crozier	435 646-4825	Regulatory Tech

SIGNATURE	DATE
N/A	7/9/2012

RECEIVED: Jul. 09, 2012

The Utah Division of Oil, Gas, and Mining

- State of Utah
- Department of Natural Resources

Electronic Permitting System - Sundry Notices

Request for Permit Extension Validation Well Number 43013504020000

API: 43013504020000
Well Name: MEAGHER 12-21-4-2
Location: 1982 FSL 0658 FWL QTR NWSW SEC 21 TWNP 040S RNG 020W MER U
Company Permit Issued to: NEWFIELD PRODUCTION COMPANY
Date Original Permit Issued: 7/22/2010

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- **Is bonding still in place, which covers this proposed well?** ◉ **Yes** ○ **No**

Signature: Mandie Crozier **Date:** 7/9/2012
Title: Regulatory Tech **Representing:** NEWFIELD PRODUCTION COMPANY

RECEIVED: Jul. 09, 2012

GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

August 15, 2013

Newfield Production Company
Route #3 Box 3630
Myton, UT 84052

Re: APD Rescinded – Meagher 12-21-4-2, Sec. 21, T.4S, R.2W
Duchesne County, Utah API No. 43-013-50402

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on July 22, 2010. On July 12, 2011 and July 11, 2012 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective August 15, 2013.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
Brad Hill, Technical Service Manager

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114 -5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

UTAH DNR
OIL, GAS & MINING