



## FLOWLINE ABANDONMENT FORM

<b>SITE NAME:</b> GUTTERSEN USX D21-17							<b>DATE:</b> 9/9/2024	<b>REM. PROJECT #:</b> 36262	<b>WEATHER:</b> SUNNY 80S	
<b>SITE DIRECTIONS:</b> CR 34 AND 53, E .9 MI, S 1.4 MI, W 1/10 INTO SITE AREA							<b>CLIENT:</b> Noble			
<b>LEGALS AND LAT/LONG:</b> 40.214610, -104.551350							<b>TASMAN PERSONNEL:</b> M. REYNOLDS, K. MAGOURIK			
<b>SOIL TYPES:</b> Well Graded Sand - SW							<b>SURFACE GRADIENT:</b>			
SOIL SAMPLING							FACILITY INFRASTRUCTURE			
Date/Time	Soil Sample ID	PID (ppm)	Visual	Olfactory	Photo?	Grab or Lab Sample?	EQUIPMENT		Quantity	Photo?
							Above Ground Storage Tank (AST)			
09-09-2024 13:42	FL01R-W@3'	0.0	No Staining	No Odor	Yes	Lab	Buried or Partially Buried Vessel			
09-09-2024 10:06	FL01R-S@3'	1.9	No Staining	No Odor	Yes	Lab	Separator			
09-09-2024 10:30	FL01-01@3'	0.1	No Staining	No Odor	Yes	Lab	Emission Control Device (ECD)			
09-09-2024 11:37	FL01-02@3'	0.7	No Staining	No Odor	Yes	Grab	Dump Line			
09-09-2024 11:59	FL01-03@3'	0.7	No Staining	No Odor	Yes	Grab	Wellhead			
09-09-2024 12:17	FL01-04@3'	2.6	No Staining	No Odor	Yes	Grab	Flowline		1	✓
09-09-2024 12:42	FL01-05@3'	0.1	No Staining	No Odor	Yes	Grab	Other:			
09-09-2024 12:56	FL01-06@3'	1.1	No Staining	No Odor	Yes	Grab	Soil Loads Removed			
09-09-2024 13:07	FL01-07@3'	0.7	No Staining	No Odor	Yes	Grab	<b>IMPACTED SOIL IDENTIFIED?</b>			
09-09-2024 13:28	FL01-08@3'	0.0	No Staining	No Odor	Yes	Lab	<b>ESTIMATED VOLUME OF IMPACTS:</b>			
							Date	Number	CY	
							Total Removed		0	0
							<b>Disposal Facility:</b>			
							Groundwater Recovery			
							<b>DATE GW ENCOUNTERED:</b>		<b>DEPTH:</b>	
							<b>GROUNDWATER IN CONTACT WITH IMPACTED SOIL?</b>			
							<b>LNAPL OR SHEEN OBSERVED ON GW?</b>			
GROUNDWATER SAMPLING							Date		BBLs	
Date/Time	Groundwater Sample ID	Depth Collected	Turbid?	Sheen?	Odor?	Photo?				
							Total Removed		0	
							<b>Disposal Facility:</b>			





<b>Equipment ID:</b> FLO1R=W@3'	<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> FACING NORTH		

<b>Equipment ID:</b> FLO1R-S@3'	<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> FACING NORTH		



<b>Equipment ID:</b> FL01-01 @ 3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING WEST			

<b>Equipment ID:</b> FL01-02 @ 3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING EAST			



<b>Equipment ID:</b> FL01-03@3'		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b> FL01-04@3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water		<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING EAST				<b>Notes/Conditions:</b> FACING WEST			



<b>Equipment ID:</b> FL01-05 @3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING WEST			



<b>Equipment ID:</b> FL01-06 @3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING EAST			



<b>Equipment ID:</b> FL01-07 @ 3'		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b> FL01-08 @ 3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water		<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING EAST				<b>Notes/Conditions:</b> FACING SOUTH			



## FLOWLINE ABANDONMENT FORM

<b>SITE NAME:</b> GUTTERSEN STATE USX D21-27D							<b>DATE:</b> 9/9/2024	<b>REM. PROJECT #:</b> 36266	<b>WEATHER:</b> SUNNY 80S		
<b>SITE DIRECTIONS:</b> CR 34 AND 53, E .9 MI, S 1.4 MI, W 1/10 INTO SITE AREA							<b>CLIENT:</b> Noble				
<b>LEGALS AND LAT/LONG:</b> 40.214660, -104.551290							<b>TASMAN PERSONNEL:</b> M. REYNOLDS, K. MAGOURIK				
<b>SOIL TYPES:</b> Well Graded Sand - SW							<b>SURFACE GRADIENT:</b>				
<b>SOIL SAMPLING</b>							<b>FACILITY INFRASTRUCTURE</b>				
Date/Time	Soil Sample ID	PID (ppm)	Visual	Olfactory	Photo?	Grab or Lab Sample?	EQUIPMENT		Quantity	Photo?	
							Above Ground Storage Tank (AST)				
09-09-2024 13:36	FL01R-W@3'	0.4	No Staining	No Odor	Yes	Lab	Buried or Partially Buried Vessel				
09-09-2024 10:00	FL01R-S@3'	2.9	No Staining	No Odor	Yes	Lab	Separator				
09-09-2024 10:18	FL01-01@3'	0.1	No Staining	No Odor	Yes	Lab	Emission Control Device (ECD)				
09-09-2024 11:31	FL01-02@3'	0.7	No Staining	No Odor	Yes	Grab	Dump Line				
09-09-2024 11:51	FL01-03@3'	0.6	No Staining	No Odor	Yes	Grab	Wellhead				
09-09-2024 12:10	FL01-04@3'	0.1	No Staining	No Odor	Yes	Grab	Flowline		1		
09-09-2024 12:46	FL01-05@3'	0.2	No Staining	No Odor	Yes	Grab	Other:				
09-09-2024 13:02	FL01-06@3'	0.0	No Staining	No Odor	Yes	Grab	Soil Loads Removed				
09-09-2024 13:04	FL01-07@3'	0.0	No Staining	No Odor	Yes	Grab	<b>IMPACTED SOIL IDENTIFIED?</b>				
09-09-2024 13:20	FL01-08@3'	0.0	No Staining	No Odor	Yes	Lab	<b>ESTIMATED VOLUME OF IMPACTS:</b>				
09-09-2024 13:53	BKG01@0-6"	0.0	No Staining	No Odor	Yes	Lab	Date	Number	CY		
09-09-2024 13:56	BKG01@3'	0.0	No Staining	No Odor	Yes	Lab					
							Total Removed		0	0	
							<b>Disposal Facility:</b>				
							<b>Groundwater Recovery</b>				
							<b>DATE GW ENCOUNTERED:</b>			<b>DEPTH:</b>	
							<b>GROUNDWATER IN CONTACT WITH IMPACTED SOIL?</b>				
							<b>LNAPL OR SHEEN OBSERVED ON GW?</b>				
<b>GROUNDWATER SAMPLING</b>							Date	BBLs			
Date/Time	Groundwater Sample ID	Depth Collected	Turbid?	Sheen?	Odor?	Photo?					
							Total Removed		0		
							<b>Disposal Facility:</b>				



**Photographic Log**


<b>Equipment ID:</b> FL01R-W@3'	<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> FACING NORTH		

<b>Equipment ID:</b> FL01R-S@	<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water
<b>Notes/Conditions:</b> FACING NORTH		



<b>Equipment ID:</b> FL01-01 @ 3'		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b> FL01-02 @ 3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water		<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING EAST				<b>Notes/Conditions:</b> FACING EAST			



<b>Equipment ID:</b> FL01-03@3'		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b> FL01-04@3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water		<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING EAST				<b>Notes/Conditions:</b> FACING WEST			



<b>Equipment ID:</b> FL01-05 @3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING WEST			



<b>Equipment ID:</b> FL01-06 @3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING EAST			



<b>Equipment ID:</b> FL01-07@3'		<b>Equipment Type:</b> Flowline		<b>Equipment ID:</b> FL01-08@3'		<b>Equipment Type:</b> Flowline	
<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water		<b>Material:</b> Steel	<b>Volume:</b>	<b>Contents:</b> Oil/Gas/Water	
<b>Notes/Conditions:</b> FACING EAST				<b>Notes/Conditions:</b> FACING SOUTH			



<b>Equipment ID:</b> BKG01		<b>Equipment Type:</b>		<b>Equipment ID:</b>		<b>Equipment Type:</b>	
<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>		<b>Material:</b>	<b>Volume:</b>	<b>Contents:</b>	
<b>Notes/Conditions:</b> FACING EAST UPPER SQUARE - BKG01@0-6" LOWER SQUARE - BKG01@3' LITHOLOGY - SW, well graded sand, tan, dry, medium, f-mg, no staining/odor				<b>Notes/Conditions:</b>			

**TABLE 1**  
**FIELD DATA SUMMARY TABLE**  
**NOBLE ENERGY, INC. - 100322**  
**GUTTERSEN USX D21-17 FLOWLINE, WELD COUNTY, COLORADO**  
**REM # 36262**

Sample ID	Sample Date	Depth (ft. bgs)	GPS Data Latitude/Longitude		PDOP Value	VOC Concentration (ppm)
FL01R-W@3'	09/09/24	3	40.214595	-104.551310	0.9	0.0
FL01R-S@3'	09/09/24	3	40.213693	-104.547764	NC	1.9
FL01-01@3'	09/09/24	3	40.213633	-104.547861	0.9	0.1
FL01-02@3'	09/09/24	3	40.213829	-104.548376	0.8	0.7
FL01-03@3'	09/09/24	3	40.214081	-104.548924	0.8	0.7
FL01-04@3'	09/09/24	3	40.214298	-104.549413	0.8	2.6
FL01-05@3'	09/09/24	3	40.214486	-104.549809	0.9	0.1
FL01-06@3'	09/09/24	3	40.214674	-104.550251	0.7	1.1
FL01-07@3'	09/09/24	3	40.214846	-104.550622	0.9	0.7
FL01-08@3'	09/09/24	3	40.214952	-104.550894	0.9	0.0
BKG01@0-6' <sup>[3]</sup>	09/09/24	0-0.5	40.214481	-104.550620	0.8	0.0
BKG01@3' <sup>[3]</sup>	09/09/24	3	40.214481	-104.550620	0.8	0.0

**Notes:**

1. Global Positioning System (GPS) data is provided in decimal degrees using North American Datum (NAD) 83 UTM Zone 13 North.
2. Volatile organic compound (VOC) concentrations are measured in the field using a photoionization detector (PID).
3. Sample collected during Gutteresen State USX D21-27 decommissioning (Remediation # 36266).

PDOP = Position Dilution of Precision

ppm = Parts per million

ft. = Feet

bgs = Below ground surface

NC = Data not collected

TABLE 2  
SUMMARY OF VOLATILE ORGANIC SOIL CHEMISTRY DATA  
OPERATOR - NOBLE 100322  
GUTTERSEN USX D21-17 FLOWLINE, WELD COUNTY, COLORADO  
REM # 36262

Sample ID	Sample Date	Depth (ft. bgs)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Xylenes (mg/kg)	1,2,4-Trimethyl-Benzene (mg/kg)	1,3,5-Trimethyl-Benzene (mg/kg)	Naphthalene (mg/kg)	TPH (mg/kg)	TPH GRO (mg/kg)	TPH DRO (mg/kg)	TPH ORO (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			1.2	490	5.8	58	30	27	2	500	500**		
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.0026	0.69	0.78	9.9	0.0081	0.0087	0.0038	500	500**		
FL01R-W@3'	09/09/24	3	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL01R-S@3'	09/09/24	3	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL01-01@3'	09/09/24	3	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50
FL01-08@3'	09/09/24	3	<0.0020	<0.0050	<0.0050	<0.010	<0.0050	<0.0050	<0.0038	<500	<0.50	<50	<50

**Notes:**

1. **Bold** values exceed the ECMC Table 915-1 limit(s).
2. Pink & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL).
3. \* Indicates laboratory minimum detection limit in excess of SSL.
4. \*\* Summation of GRO+DRO+ORO must be less than 500 mg/kg.

ECMC = Energy & Carbon Management Commission

(<) = Analytical result is less than the indicated laboratory reporting limit.

TPH-GRO = Total petroleum hydrocarbons - gasoline range organics

TPH-DRO = Total petroleum hydrocarbons - diesel range organics

TPH-ORO = Total petroleum hydrocarbons - oil range organics

mg/kg = Milligrams per kilogram

ft. = Feet

bgs = Below ground surface

TABLE 3  
SUMMARY OF POLYCYCLIC AROMATIC HYDROCARBON SOIL CHEMISTRY DATA  
OPERATOR - NOBLE 100322  
GUTTERSEN USX D21-17 FLOWLINE, WELD COUNTY, COLORADO  
REM # 36262

Sample ID	Sample Date	Depth (ft. bgs)	Acenaphthene (mg/kg)	Anthracene (mg/kg)	Benzo (a) Anthracene (mg/kg)	Benzo (a) Pyrene (mg/kg)	Benzo (b) Fluoranthene (mg/kg)	Benzo (k) Fluoranthene (mg/kg)	Chrysene (mg/kg)	Dibenzo (a,h) Anthracene (mg/kg)	Fluoranthene (mg/kg)	Fluorene (mg/kg)	Indeno (1,2,3-cd) Pyrene (mg/kg)	Pyrene (mg/kg)	1-Methyl - Naphthalene (mg/kg)	2-Methyl- Naphthalene (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			360	1,800	1.1	0.11	1.1	11	110	0.11	240	240	1.1	180	18	24
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.55	5.8	0.011	0.24	0.3	2.9	9	0.096	8.9	0.54	0.98	1.3	0.006	0.019
FL01R-W@3'	09/09/24	3	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01R-S@3'	09/09/24	3	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-01@3'	09/09/24	3	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
FL01-08@3'	09/09/24	3	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500

**Notes:**

1. **Bold** values exceed the ECMC Table 915-1 limit(s).
2. Pink & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL).
3. \* Indicates laboratory minimum detection limit in excess of SSL.

ECMC = Colorado Energy & Carbon Management Commission  
(<) = Analytical result is less than the indicated laboratory reporting limit.  
ft. = Feet  
bgs = Below ground surface  
mg/kg = Milligrams per kilogram

**TABLE 4**  
**SUMMARY OF SOIL SUITABILITY FOR RECLAMATION**  
**OPERATOR- NOBLE 100322**  
**GUTTERSEN USX D21-17 FLOWLINE, WELD COUNTY, COLORADO**  
**REM # 36262**

Sample ID	Sample Date	Depth (ft. bgs)	pH (Standard Units)	EC (mmhos/cm)	SAR (Standard Units)	Boron (mg/L)
ECMC Table 915-1 Soil Suitability Limits			6 - 8.3	<4	<6	2
FL01R-W@3'	09/09/24	3	7.90	0.459	0.654	<2.00
FL01R-S@3'	09/09/24	3	8.20	0.227	0.215	<2.00
FL01-01@3'	09/09/24	3	6.66	0.331	0.543	<2.00
FL01-08@3'	09/09/24	3	7.36	0.771	0.922	<2.00
BKG01@0-6" <sup>[6]</sup>	09/09/24	0-0.5	6.11	0.172	0.105	<2.00
BKG01@3" <sup>[4]</sup>	09/09/24	3	7.22	0.0738	0.160	<2.00
Maximum Root Background Concentration (0 - 3 ft)			7.22	-	-	-
Maximum Background Concentration			7.22	-	-	-

**Notes:**

1. **Bold** faced values exceed the ECMC Table 915-1 limit(s), but are within background concentrations.
2. **Red** faced values exceed the ECMC Table 915-1 limit(s) and native background concentrations.
3. Brown highlighted soil analytical values indicate a regulatory exceedance.
4. Sample collected during Guttersen State USX D21-27 decommissioning (Remediation # 36266).

ECMC = Colorado Energy & Carbon Management Commission

EC = Electrical conductivity

SAR = Sodium adsorption ratio

mmhos/cm = millimhos per centimeter

mg/L = milligram per liter

(<) = Analytical result is less than the indicated laboratory reporting limit.

ft. = Feet

bgs = Below ground surface

TABLE 5  
SUMMARY OF METALS IN SOIL CHEMISTRY DATA  
OPERATOR- NOBLE 100322  
GUTTERSEN USX D21-17 FLOWLINE, WELD COUNTY, COLORADO  
REM # 36262

Sample ID	Sample Date	Depth (ft. bgs)	Arsenic (mg/kg)	Barium (mg/kg)	Cadmium (mg/kg)	Chromium (VI) <sup>[4]</sup> (mg/kg)	Copper (mg/kg)	Lead (mg/kg)	Nickel (mg/kg)	Selenium (mg/kg)	Silver (mg/kg)	Zinc (mg/kg)
ECMC Table 915-1 Limits (Residential SSL)			0.68	15,000	71	0.3	3,100	400	1,500	390	390	23,000
ECMC Table 915-1 Limits (Protection of Groundwater SSL)			0.29	82	0.38	0.00067	46	14	26	0.26	0.8	370
FL01R-W@3'	09/09/24	3	<b>2.09</b>	51.8	<0.181	<0.30	3.33	4.91	3.57	<0.236	0.0234	13.4
FL01R-S@3'	09/09/24	3	<b>1.26</b>	34.8	<0.200	<0.30	2.95	3.99	2.71	<0.260	<0.0200	11.7
FL01-01@3'	09/09/24	3	<b>1.05</b>	26.7	<0.200	<0.30	2.52	4.07	1.92	<0.260	<0.0200	9.59
FL01-08@3'	09/09/24	3	<b>1.35</b>	39.4	<0.200	<0.30	3.06	4.60	2.72	<0.260	<0.0200	13.1
BKG01@0-6" <sup>[6]</sup>	09/09/24	0-0.5	1.23	31.2	<0.200	<0.30	2.58	4.97	2.14	<0.260	<0.0200	9.01
BKG01@3" <sup>[6]</sup>	09/09/24	3	1.98	38.2	<0.200	<0.30	2.38	3.99	2.96	<0.260	0.0206	9.20
Maximum Background Concentration			1.98	-	-	-	-	-	-	-	-	-
Maximum Background Concentration X 1.25			2.48	-	-	-	-	-	-	-	-	-

**Notes:**

- Bold** faced values exceed the ECMC Table 915-1 limit(s), but are within 1.25x background concentrations.
- Red** faced values exceed the ECMC Table 915-1 limit(s) and native background concentrations.
- Red & blue highlighted soil analytical values indicate an exceedance of the referenced soil screening level (SSL).
- Compound falls within ECMC Table 915-1 Footnote 9.
- Non-detect background results accounted for in the highest background concentration by using the reporting limit.
- Sample collected during Gutteresen State USX D21-27 decommissioning (Remediation # 36266).

ECMC = Energy & Carbon Management Commission

(<) = Analytical result is less than the indicated laboratory reporting limit.

mg/kg = Milligrams per kilogram

ft. = Feet

bgs = Below ground surface



**Legend**

- Soil Sample Location – No Organic Exceedances (Collected via Trimble GPS)
- Soil Sample Location – Field Screen (Collected via Trimble GPS)
- Flowline Location (Collected via Trimble GPS)

**Notes**

- 1) All locations are approximate unless otherwise noted.
- 2) Buried infrastructure has been spatially projected.

GPS – Global Positioning System  
 PID – Photoionization Detector  
 ppm – Parts per million  
 GSSL – Protection of Groundwater Soil Screening Levels  
 RSSLs – Residential Soil Screening Levels

0 ft.      50 ft.      100 ft.

Image Source: Google Earth; Google 2021

DATE:	September 18, 2024
DESIGNED BY:	J. Whritenour
DRAWN BY:	M. Liston

**TASMAN**  
 GEOSCIENCES

Tasman Geosciences, Inc.  
 6855 W 119<sup>th</sup> Avenue  
 Broomfield, CO 80020

**Noble Energy, Inc. – DJ Basin**  
**Guttersen USX D21-17**  
 NENE, Section 21, Township 3 North, Range 64 West  
 Weld County, Colorado

Soil Sample Locations Map

FIGURE  
 1