

Final Reclamation Plan for Well Site
697-23A as submitted to Colorado Oil &
Gas Conservation Commission (COGCC) on
11/14/2015

Well Site 697-23A Reclamation Plan



1501 Stamped Ave. Cody, WY 82414 TEL 307-527-4961

Table of Contents

	Page
1.0 Introduction.....	1
2.0 Final Reclamation Consultation.....	2
3.0 Final Reclamation of Well Sites and Associated Production Facilities	3
3.1 Overview	2
3.2 Preliminary Schedule	3
3.3 Abandonment	3
3.3.1 Well Sites	3
3.3.2 Subsurface Flowlines	4
3.3.3 Drilling & Washout Pits	5
3.3.4 Surface Equipment	5
3.4 Reclamation	5
3.4.1 Restoration & Revegetation	5
3.4.2 Seed Bed Preparation	6
3.4.3 Reseeding	6
3.4.4 Additional Revegetation	7
3.5 Site Protection	7
3.5.1 Fencing	7
3.6 Storm Water Management	7
3.7 Weed Management	7
3.8 Vegetation Monitoring & Site Stabilization	8
4.0 Attachments.....	9
4.1 Site Survey Documents.....	10
4.1.1 Vicinity Maps	
4.1.2 Pre-construction site pictures	
4.1.3 Pad Site Maps	
4.1.4 Pad Cross Section Drawings	
4.1.5 Well Direction Layout	
4.1.6 Facilities Layout (<i>Initial Proposal</i>)	
4.1.7 Bottom Hole Locations (<i>Initial Proposal</i>)	
4.1.8 Plat for Surface Hole Locations	
4.2 MOC BMP's for Piceance Basin	30
4.3 Current Site Pictures	included upon submittal
4.4 MOC Waste Management Plan.....	provided upon request

1.0 - Introduction

At the request of the COGCC, Marathon Oil intends to perform a final reclamation on Pad 697-23A, an undrilled pad located in the Grand Valley Field within Garfield County. Corresponding well location information is as follows:

Well #	API #	COGCC Permit #	GPS Coordinates (°Lat/°Long)	QtrQtr	Sec	Twp	Rng
697-23A-12	05-045-14857-00	20088185	39.51507/108.18455	NW NE	23	06S	97W
697-23A-14	05-045-14856-00	20088186	39.51505/108.18455	NW NE	23	06S	97W
697-23A-16	05-045-14854-00	20088187	39.51490/108.18455	NW NE	23	06S	97W
697-23A-18	05-045-14855-00	20088188	39.51486/108.18455	NW NE	23	06S	97W
697-23A-21	05-045-14861-00	20088189	39.51503/108.18455	NW NE	23	06S	97W
697-23A-23	05-045-14860-00	20088191	39.51501/108.18455	NW NE	23	06S	97W
697-23A-25	05-045-14859-00	20088183	39.51492/108.18455	NW NE	23	06S	97W
697-23A-27	05-045-14858-00	20088184	39.51488/108.18455	NW NE	23	06S	97W
697-23A-XX	NA	NA	NA	NA	NA	NA	NA

Well site 697-23A was developed during Marathon’s active drilling to the extent that conductor casings for each of the intended wells and other minor facilities were installed; however, since initial development the location has sat idle pending the return of active drilling to the area as dictated by commodity pricing. Throughout the life of the pad, Marathon has maintained a verbal agreement with the land owner, Puckett Land Company, to leave the pad open and controlled to allow for later development. These agreements have included the need for storm water management controls, site stabilization through seeding of the disturbed areas along the edge of location, semi-annual weed control, and site security controls.

Due to current economic conditions, Marathon has elected to allow previously approved APDs to expire in 2015, and no longer has plans to drill out the location in the near future.

Marathon intends to complete the proposed reclamation work between Spring 2016 melt-off and June 1, 2016, to allow for springtime seeding. Work will be scheduled to begin on or before May 1, 2016 as onsite conditions allow.

2.0 - Final Reclamation Consultation

Pursuant to COGCC Rule 306.e, Marathon Oil Company will make a best effort to consult the affected surface owner, Puckett Land Company, a minimum of thirty days (30 days) prior to commencing any abandonment and reclamation activity; said consultation will occur directly between Marathon Oil Company and Puckett Land Company so as to promote a good faith arrangement and incorporate the land owner's preferences regarding the proposed operations and all aspects of final reclamation.

3.0 - Final Reclamation of Well Sites and Associated Production Facilities

3.1 - Overview

Marathon Oil Corporation intends to perform final reclamation in accordance with current COGCC regulations, industry Best Management Practices (BMP's), and BMP's developed specifically for the Piceance Basin by Marathon Oil Corporation (see attached).

To be included in the final reclamation, Well Site 697-23A contains subsurface and surface equipment as listed below:

- 9 Conductor Casings
- 9 Flowlines associated with each of the wells (various lengths but contained on location)
- 13 Concrete Jersey Barriers
- Unlined reserve pit for drill rig, approximately 150'x75'x10' (includes wildlife fence)
- A small lined cement washout pit, approximately 15'x15'x4' (includes wildlife fence)
- Meter shack and lateral gas line (Owned by EPCO)
- Compacted site location and access road (approx. 3.13 acres)

Please see the attached site survey documentation for details concerning the current location size, layout, seeding areas, and existing storm water controls.

3.2 – Preliminary Schedule

Marathon intends to address the removal and/or abandonment of the equipment listed above prior to commencing restoration and re-vegetation of the location. A preliminary timeline of the proposed final reclamation is as follows:

May 1 st 2016	Final Reclamation Begins
May 1 st to May 7 th	Abandonment of wells
May 1 st to May 15 th	Abandonment of remaining facility
May 15 th to June 1 st	Restoration and Revegetation
June 1 st to Approved Completion	Ongoing Weed Management & Site Monitoring

3.3 - Abandonment

3.3.1 - Well Sites

Prior to the plugging and abandonment of the nine (9) surface conductors, Marathon Oil Company will submit for approval a Notice of Intent to Abandon, COGCC Form 6, to include a full and detailed description of the abandonment operations. No abandonment activity will commence without receipt of COGCC director approval of this completed form.

A brief overview of the proposed operations is as follows:

Pursuant to COGCC Rule 319, Marathon proposes to abandon in place each of the conductors by cutting the pipe to be at minimum four (4) feet below finish grade, filling the entire length of the conductor with a cement slurry which meets or exceeds API standards (see Table 1 below for specific conductor piping lengths), and lastly fitted with a welded steel plate as described in said rule. The top surface of each cap will be permanently marked to display the legal well location, well name & number, and as applicable, the API number as well.

Because the proposed wells on the location were never drilled or completed, Marathon is exempt from Background Water Quality Sampling on this location as described in Rule 318A (f)(4)b.

Table 1 – Conductor Pipe Dimensions

Conductor Pipe Dimensions for Well Site 697-23A

Well #	Pipe Dia. (in.)	Depth (ft.)
12	16	114.4
14	16	116.3
16	16	118.3
18	16	115.2
21	16	114.1
23	16	114.9
25	16	116.7
27	16	114.9
Extra	16	NA

3.3.2 - Subsurface Flowlines

Pursuant to COGCC Rule 1103, Marathon proposes to abandon in place portions of the below grade flowlines. None of the flowlines on location were connected to any hydrocarbon source at any time; as such, Marathon will perform the following for each flowline:

- Verify absence of any hydrocarbons in piping*
**If hydrocarbons found to be present, line will be purged and then retested*
- Deplete to atmospheric pressure
- Cut off any portions not at least three (3) feet below finished grade
- Seal ends

All subsurface equipment abandoned in place will be noted on surveyed drawings and notice of the abandonment will be filed with the COGCC via a Form 4 Sundry and local government entities as applicable.

3.3.3 - Drilling and Washout Pits

As the wells on site were never completed, the reserve pit and cement washout pit on location were never exposed to any non-native materials or fluids. Both pits are currently fenced to protect wildlife.

Prior to closure and reclamation of pit locations, soil sampling of the pit walls and bottom will be performed* to verify compliance with acceptable concentrations as specified within COGCC Table 910-1. Following sampling and during re-contouring operations, the pits will be closed using native fill material currently on site in accordance with 1000 series COGCC rules. **Note: as of submittal date, soil sampling scheduled to occur on or before 12/1/15.*

The liner in the cement washout pit will be removed and disposed of according to Marathon's Waste Management Plan (likely West Garfield County Landfill). All wildlife fencing will be removed and stored for recycling on adjacent operations.

3.3.4 - Surface Equipment

Marathon will remove all surface equipment on location as described above and recycle the equipment in adjacent operations or dispose of per our Waste Management Plan (see attached). Marathon will also work directly with EPCO to remove their meter shack and abandon any flowlines in place per COGCC Rule 1103.

All other equipment, weeds, rubbish, etc. will be removed and disposed of according to Marathon's Waste Management Plan.

3.4 - Reclamation

3.4.1 - Restoration and Revegetation

Pursuant to COGCC Rule 1003, immediately following surface equipment removal and subsurface equipment abandonment, Marathon will recontour all disturbed areas as nearly as practicable to their original conditions unless directed otherwise per landowner preference.

The surface of the existing location and access road will be ripped as necessary to a depth not to exceed 24 inches, and on 18-24 inch centers. Fugitive dust will be contained via freshwater spreading as needed. As the site is on non-crop land, no special considerations to soil moisture content need be made at time of ripping.

All disturbed areas, including the well pad, access road, and any disturbance necessary for EPCO pipeline abandonment will be recontoured as near as practicable to pre-construction condition so as to achieve erosion control and soil stability, and /or to contours that blend with the

surrounding topography. All fill materials including the onsite sourced aggregate cap layer and secondary containment berms will be pushed back into cut and against back slopes as appropriate to successfully re-contour the location. (*Pre-construction survey and pictures attached for reference*)

697-23A currently contains a topsoil pile reserved during construction sufficient for the reclamation. Topsoil will be evenly distributed across the location, prepped, and seeded using methods appropriate for a successful reclamation as described below.

3.4.2 - Seed Bed Preparation

Following re-contouring, the surface will be scarified and tracked to prepare for seeding and retain moisture. If tracking or pocking / pitting is required to prepare the surface, the pitting rows will be irregularly spaced and irregularly aligned, but will be perpendicular to the expected flow of runoff to retain moisture.

3.4.3 - Seeding

As site conditions allow, Marathon intends to reseed the reclaimed areas by hydro-seeding the location as early as possible following successful surface preparation and prior to June 1, 2016. In the event that the preferred springtime seeding is not practicable due to unforeseen conditions, Marathon may elect to re-prepare the surface and seed in the fall.

A seed mix which meets the requirements dictated by the local environment is contained below (Table 2 – Proposed Seed Mix). The seed mix will not contain noxious, prohibited, or restricted weed seeds. This seed mix will be reviewed with Puckett Land Company and adjusted to meet their preferences as necessary. Seeding rates below will be adjusted up to meet the requirement of the seeding method selected.

Table 2 – Proposed Seed Mix

Common Name	Scientific Name	Variety	PLS lbs/acre ^{1,2}
Nodding Brome	<i>Bromus anomalous</i>	VNS	2.5
Slender Wheatgrass	<i>Agropyron trachycaulum</i>	San Luis	2.5
Thickspike Wheatgrass	<i>Elymus lanceolatus ssp. lanceolatus</i>	Critana	2.5
Bluebunch Wheatgrass	<i>Agropyron spicatum</i>	Joseph, Nezpurs	2.0
Letterman Neddlegrass	<i>Stipa lettermanii</i>	VNS	2.0
Mountain Brome	<i>Bromus marginatus</i>	Garnet, Bromar	1.5
Pure Live Seed Total			13 PLS

¹ Rate numbers are in Pure Live Seed (PLS).

² Seed rates are specific to the drill seeder method. If broadcasting or hydromulching is used to disperse the seed, the seed rates above should be doubled.

3.4.4 - Additional Revegetation

The vegetation contained within the undisturbed area between the well pad and access road will be preserved. Any stockpiled woody debris, such as cleared trees and slash, as well as any large rocks will be redistributed across reclaimed areas in natural looking patterns so as to encourage vegetation growth.

3.5 - Site Protection

3.5.1 - Fencing

As the lands adjacent to the location occasionally contain cattle, the reclaimed area will be fenced to exclude livestock to ensure successful regrowth of vegetation. However, as the location is in deer and elk habitat, fences for livestock exclusion will not exceed 40 inches. The four strand fence will have smooth top and bottom wires. Distance from the ground to the bottom smooth wire will be no less than 16 inches. Distance from the top wire to the second wire will be no less than 12 inches. Middle wires will be barbed, with 6 inch spacing.

3.6 - Storm Water Management

This location is currently operated under a CDPHE Storm Water Permit and is covered by a site-specific storm water management plan. Following the reclamation efforts described above, Marathon will provide appropriate storm water controls for the area as dictated by final contouring and update the appropriate storm water management plan and map.

Storm water inspections on the location will continue as described in the permit. All storm water controls used on the location will be designed to fill in over time or break down in place.

3.7 - Weed Management

All areas affected by the reclamation will be kept as free as practicable of all undesirable plant species designated to be noxious weeds and intends to comply with the Colorado Noxious Weed Act, C.R.S. 35-5.5-115.

697-23A is currently operated under Marathon's weed management plan and vegetation beneficial to site stabilization has been retained to date. Efforts for weed management will

continue and will be updated as appropriate. Semi-annual weed spraying by certified applicators will proceed, with additional attention applied to the location due to the disturbance caused by reclamation as needed. Weed management efforts will be reviewed with Puckett Land Company during the pre-reclamation evaluation.

If an infestation of noxious weeds occurs, Marathon will notify and consult with the local weed control agency and certified applicators. Weeds will be monitored concurrent with routine storm water inspections as noted below.

3.8 - Vegetation Monitoring and Site Stabilization

Pad 697-23A is located within non-crop land. Ongoing vegetation monitoring will occur at the location during routine storm water inspections and additional seeding, weed control, storm water BMP repairs, or adjustments to the reclamation will be made as dictated by the inspector or landowner. Monitoring will continue until:

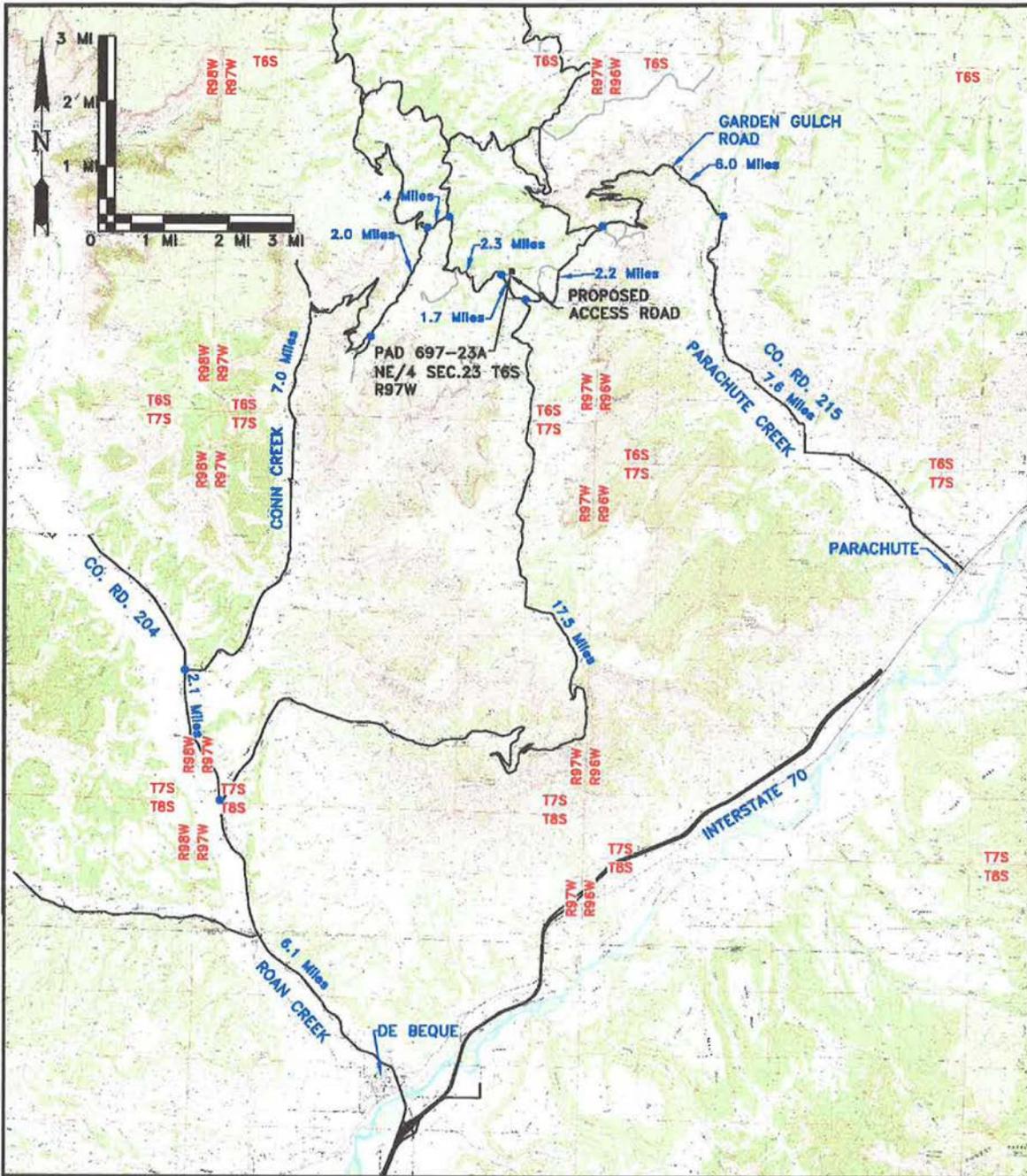
- All requirements of Rule 1003 and 1004 have been met,
- Vegetative cover has been established that reflects reference areas or adjacent, undisturbed areas, and
- The reclaimed area contains vegetative cover of at least 80% of pre-disturbed conditions or reference area levels, as determined by the Director through visual appraisal.

Marathon will submit a Form 4 Sundry when a 3rd party inspector has determined the site meets all requirements listed above. The Sundry will contain the final reclamation procedures, reference any changes made in the landowners final use, and any mitigation measures performed by Marathon.

Marathon recognizes the reclamation will not be considered complete until a final reclamation inspection has been conducted by the COGCC and the Director has notified Marathon there are no outstanding issues pertaining to COGCC rules, orders, permit conditions, or the act, and the Director notifies Marathon that the final reclamation has been approved.

4.0 - Attachments

4.1 – Site Survey Documents

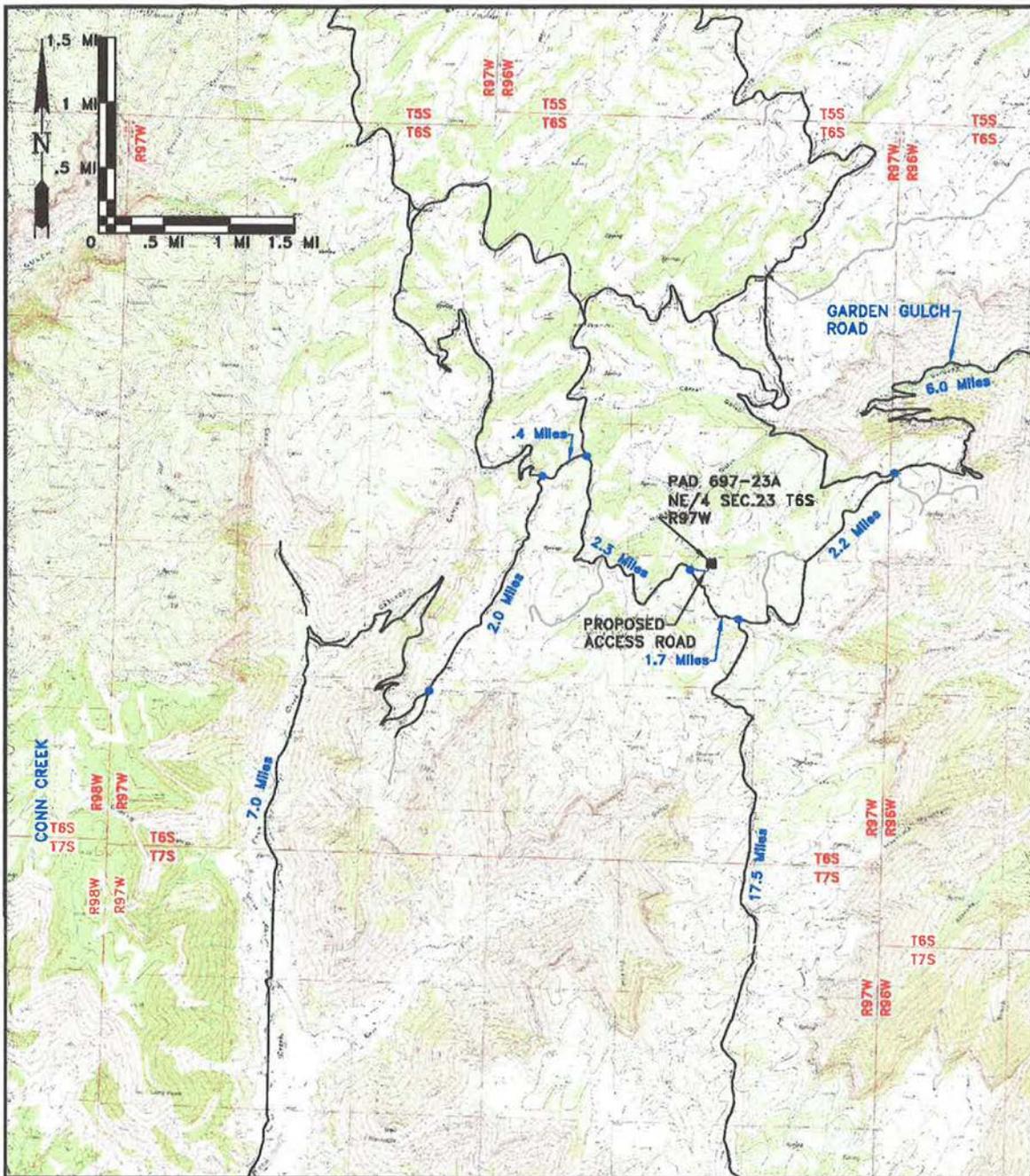


**WILLIAM H. SMITH
 & ASSOCIATES P.C.
 SURVEYING CONSULTANTS**
 660 EAST SECOND NORTH PHONE: 307-876-3636
 GREEN RIVER, WY 307-876-3639
 www.whsmthpc.com

PAD 697-23A
 LOCATED IN THE
 NE/4, SECTION 23,
 TOWNSHIP 6 SOUTH,
 RANGE 97 WEST.

VICINITY MAP FOR
 MARATHON OIL COMPANY
 P.O. BOX 3128
 HOUSTON, TX 77253
 5555 SAN FELIPE
 HOUSTON, TX 77056

DRAWN BY: CED	JOB NO: 26099	DATE: 07/30/07	SCALE: 1/2 INCH=1 MILE	TOPO MAP A1
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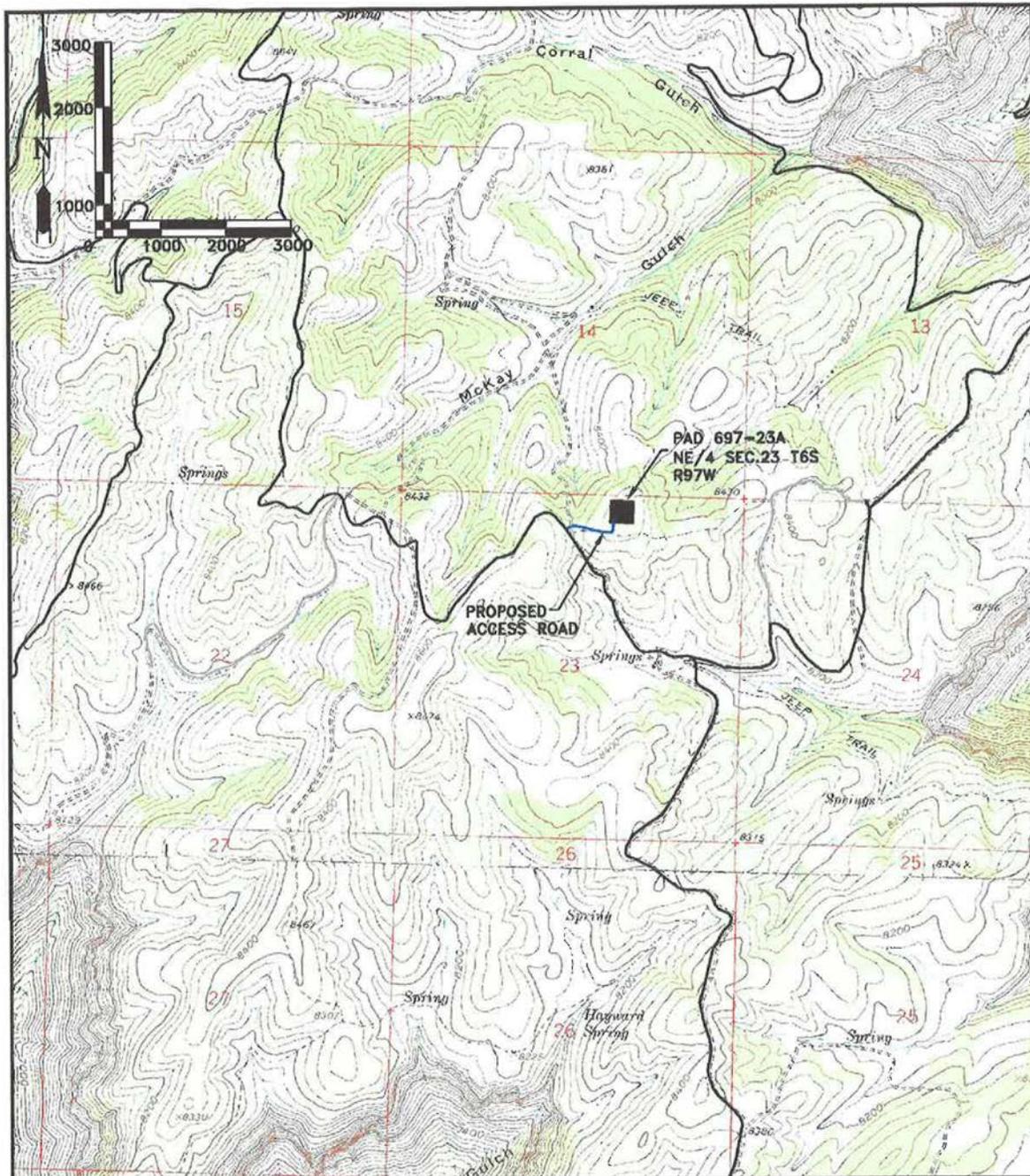


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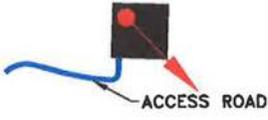
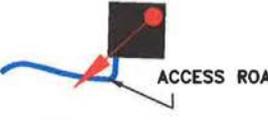
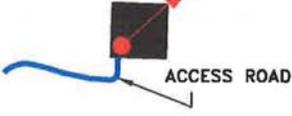
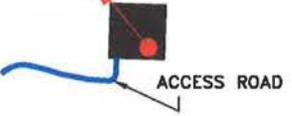
**PAD 697-23A
 LOCATED IN THE
 NE/4, SECTION 23,
 TOWNSHIP 6 SOUTH,
 RANGE 97 WEST.**

**VICINITY MAP FOR
 MARATHON OIL COMPANY
 P.O. BOX 3128
 HOUSTON, TX 77253
 5555 SAN FELIPE
 HOUSTON, TX 77056**

DRAWN BY: CED	JOB NO: 26099	DATE: 07/30/07	SCALE: 1" = 1 MILE	TOPO MAP A2
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	<p>WILLIAM H. SMITH & ASSOCIATES P.C. SURVEYING CONSULTANTS 660 EAST SECOND NORTH PHONE 307-876-3638 GREEN RIVER, WY 307-876-3639 www.wsmithpc.com</p>	<p>PAD 697-23A LOCATED IN THE NE/4, SECTION 23, TOWNSHIP 6 SOUTH, RANGE 97 WEST.</p>	<p>VICINITY MAP FOR MARATHON OIL COMPANY P.O. BOX 3128 HOUSTON, TX 77253 5555 SAN FELIPE HOUSTON, TX 77056</p>	
<p>DRAWN BY: CED</p>	<p>JOB NO: 26099</p>	<p>DATE: 07/30/07</p>	<p>SCALE: 1" = 2000'</p>	<p>TOPO MAP A3</p>

				
				
<p>NW CORNER OF PAD LOOKING SOUTHEASTERY</p> 	<p>NE CORNER OF PAD LOOKING SOUTHWESTERLY</p> 			
				
<p>SW CORNER OF PAD LOOKING NORTHEASTERY</p>	<p>SE CORNER OF PAD LOOKING NORTHWESTERLY</p>			
 <p>WILLIAM H. SMITH & ASSOCIATES P.C. SURVEYING CONSULTANTS <small>550 EAST SECOND NORTH PHONE: 307-875-3636 GREEN RIVER, WY 307-875-3839 www.whsmithpc.com</small></p>	<p>PAD 697-23A LOCATED IN THE NE/4, SECTION 23, TOWNSHIP 6 SOUTH, RANGE 97 WEST.</p>	<p>VICINITY MAP FOR MARATHON OIL COMPANY P.O. BOX 3128 HOUSTON, TX 77253 5555 SAN FELIPE HOUSTON, TX 77056 PHOTO B1</p>		
DRAWN BY: CED	JOB NO: 26099	DATE: 07/30/07	SCALE: N.T.S.	

Legend

- Area To Be Reclaimed
- Fence
- Blanket
- Cut
- Fill
- Seeded & Hydromulched
- Soil Roughening
- Snow Storage
- Rip Rap (Large Area)
- Culvert
- Sediment Trap
- Cattle Pond
- Water Bar
- Rip Rap
- Bales
- W/Check Dam
- Division Ditch
- Site Berm
- Core Berm
- Fiber Roll
- Stiff Fence

0 30 60
 Feet
 1:900

Not Present
 Asphalt Or Concrete Batch Plants

Project Location
 Garfield County

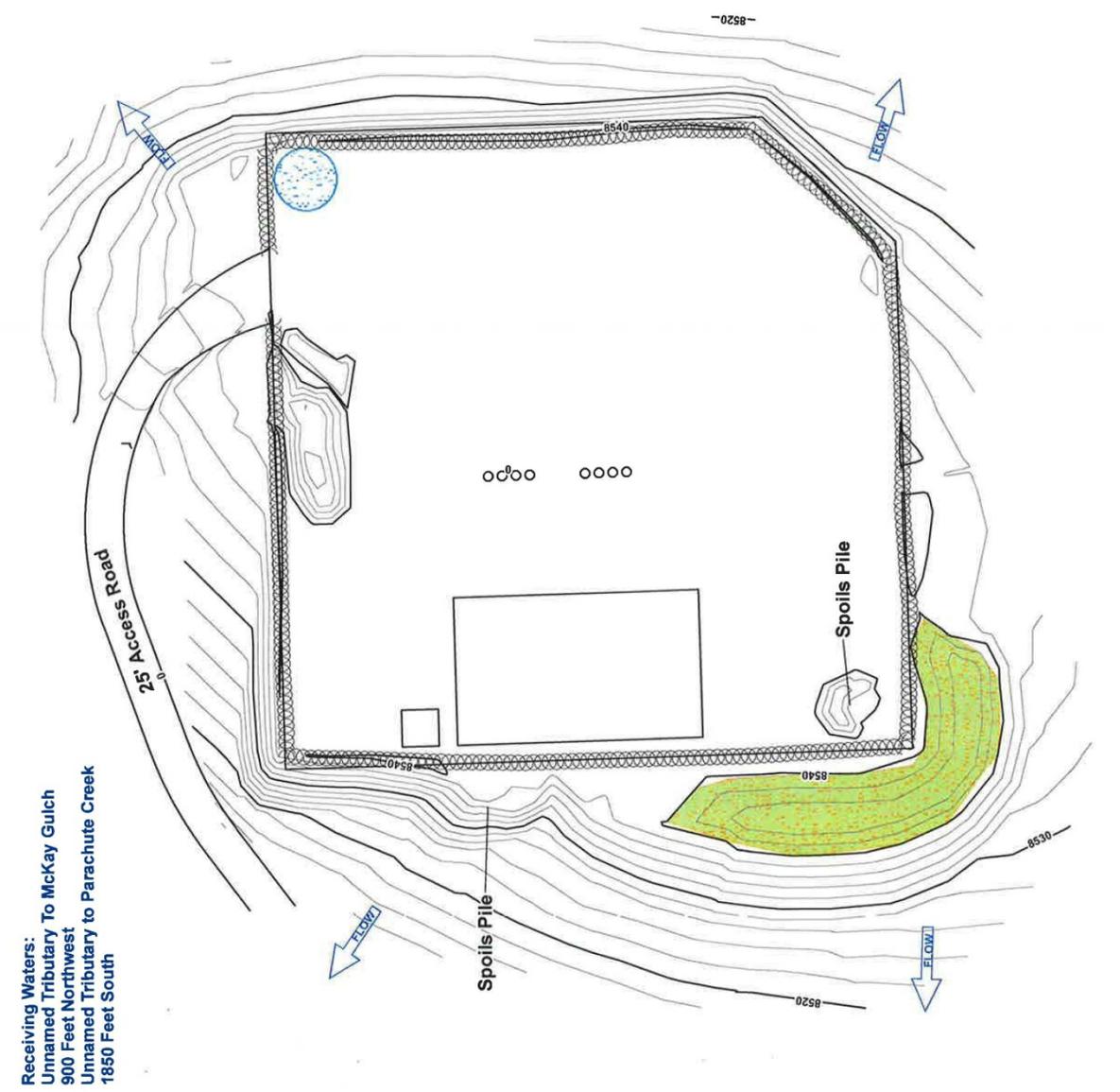
Map Index Overview

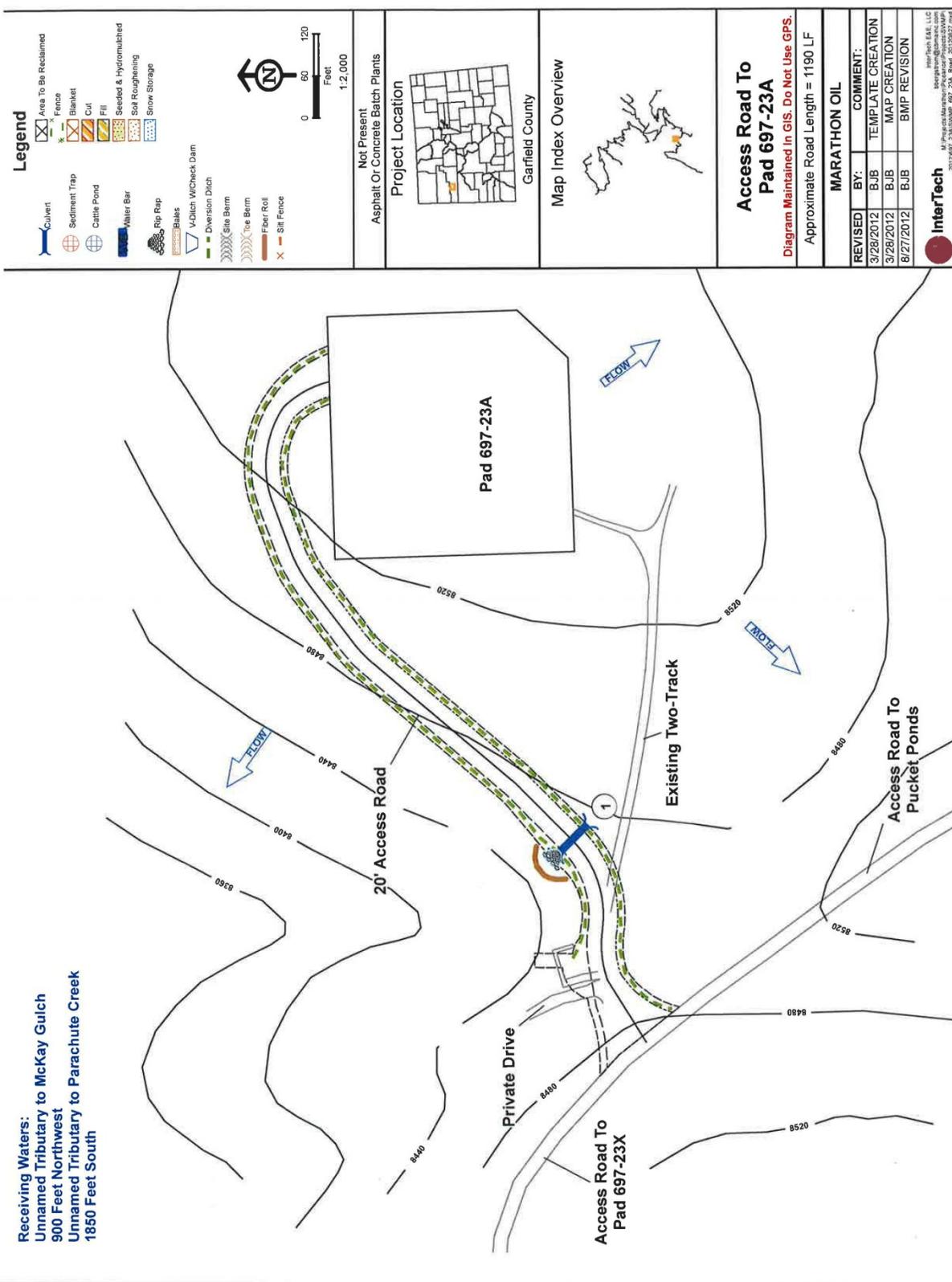
**Pad Site
 697-23A**

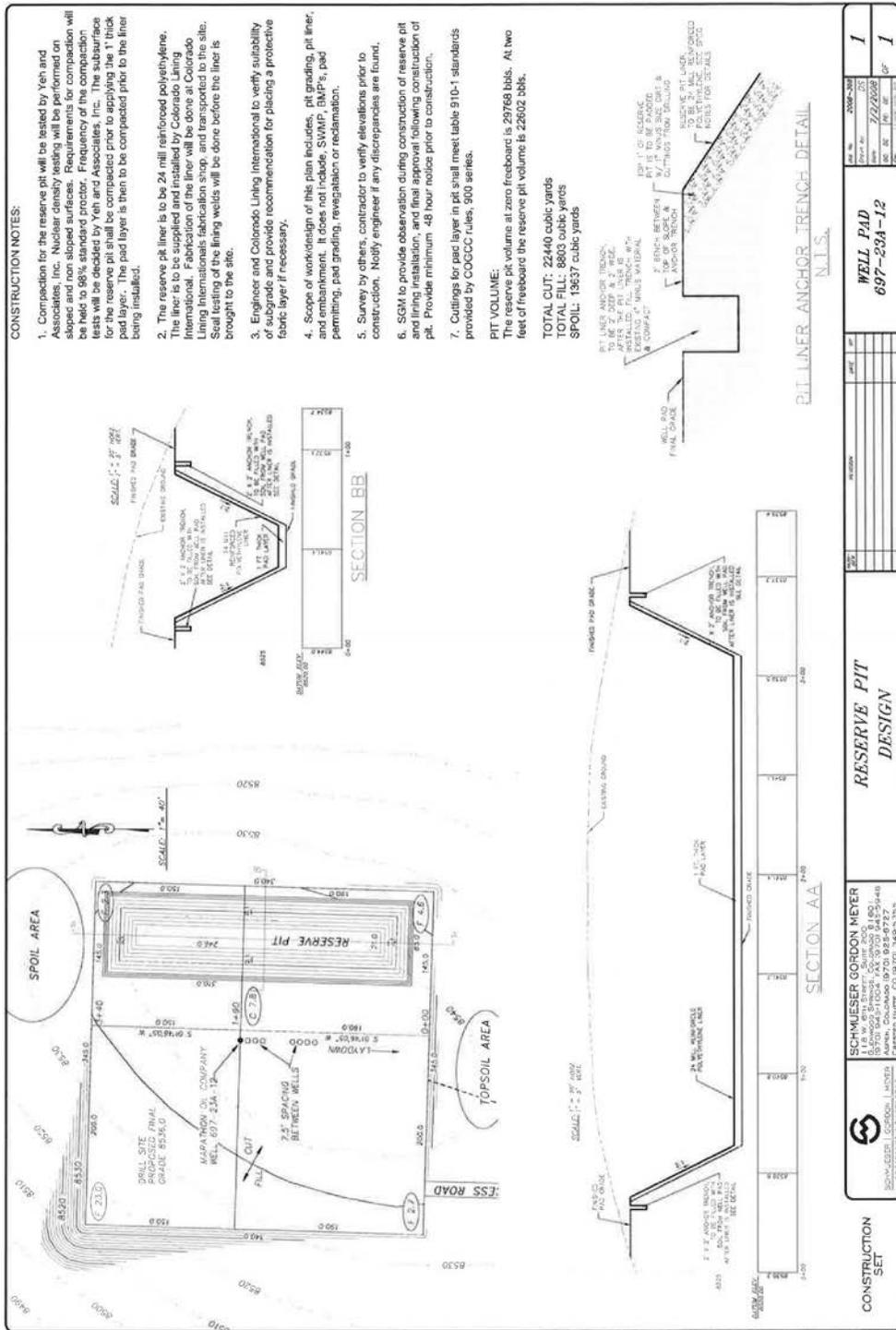
Total Disturbed Area = 3.13 Acres

MARATHON OIL		
REVISED	BY:	COMMENT:
3/28/2012	BJB	TEMPLATE CREATION
3/28/2012	BJB	MAP CREATION
8/27/2012	BJB	BMP REVISION

InterTech
 Marathon Oil Corporation
 2012-887-23A/SWMP/697-23A_20120827.mxd





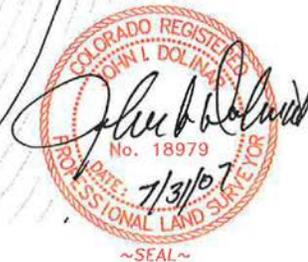
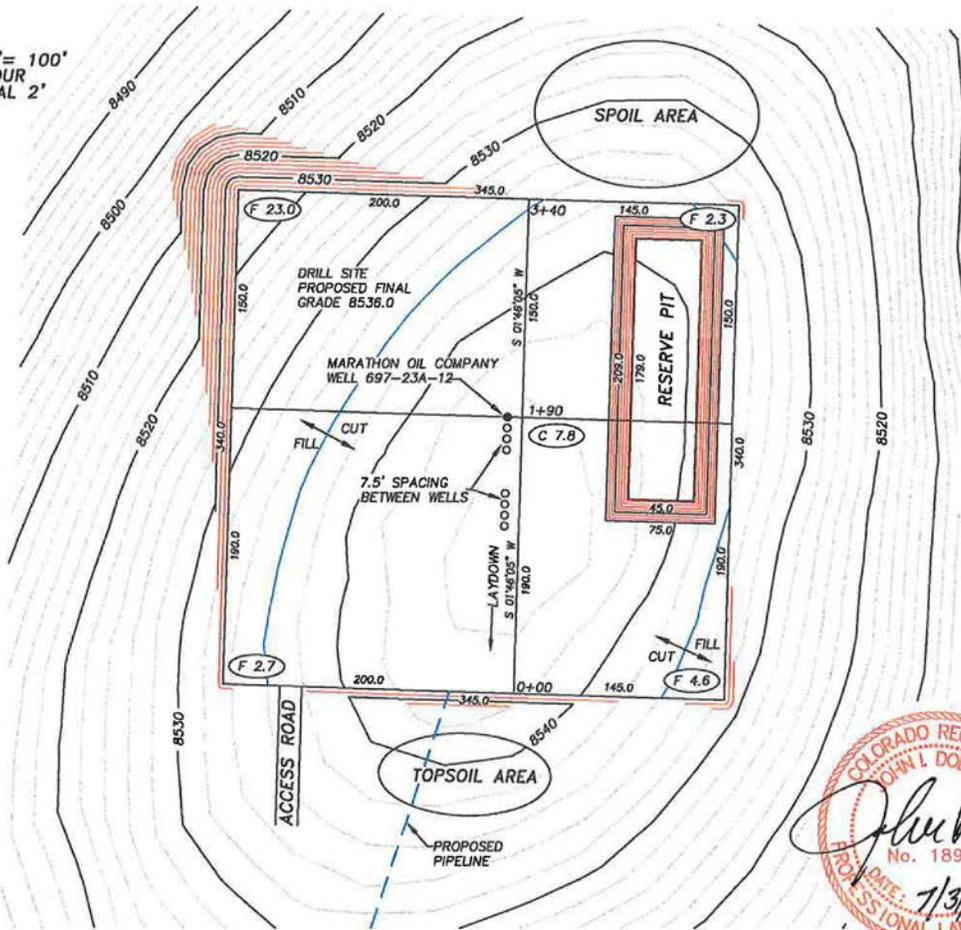


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 MARATHON OIL COMPANY
 WELL 697-23A-12

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640

Scale: 1" = 100'
 CONTOUR
 INTERVAL 2'



RESERVE PIT SIZE
 209' X 75' X 15'
 SLOPE = 1:1
 RESERVE PIT CAPACITY
 31,294 BBLs FULL
 23,369 BBLs WORKING
 CAPACITY WITH 3' FREE BOARD

JOB NO. 26099
 07/30/07/CED
 PAD 697-23A/PAD697-23A.DWG

CUT/FILL SLOPES: 1.5:1
 QUANTITIES:
 TOTAL CUT = 22,392 BANK CUBIC YARDS
 TOTAL FILL = 11,292 BANK CUBIC YARDS
 TOPSOIL AT 6 INCHES OF DEPTH = 2,442 BANK CUBIC YARDS
 SPOIL = 9,464 BANK CUBIC YARDS
 DISTURBED AREA = 131,893 SQ. FT. OR 3.03 ACRES

PREPARED FOR:
 MARATHON OIL COMPANY
 P.O. Box 3128
 Houston, TX 77253
 5555 San Felipe
 Houston, TX 77056

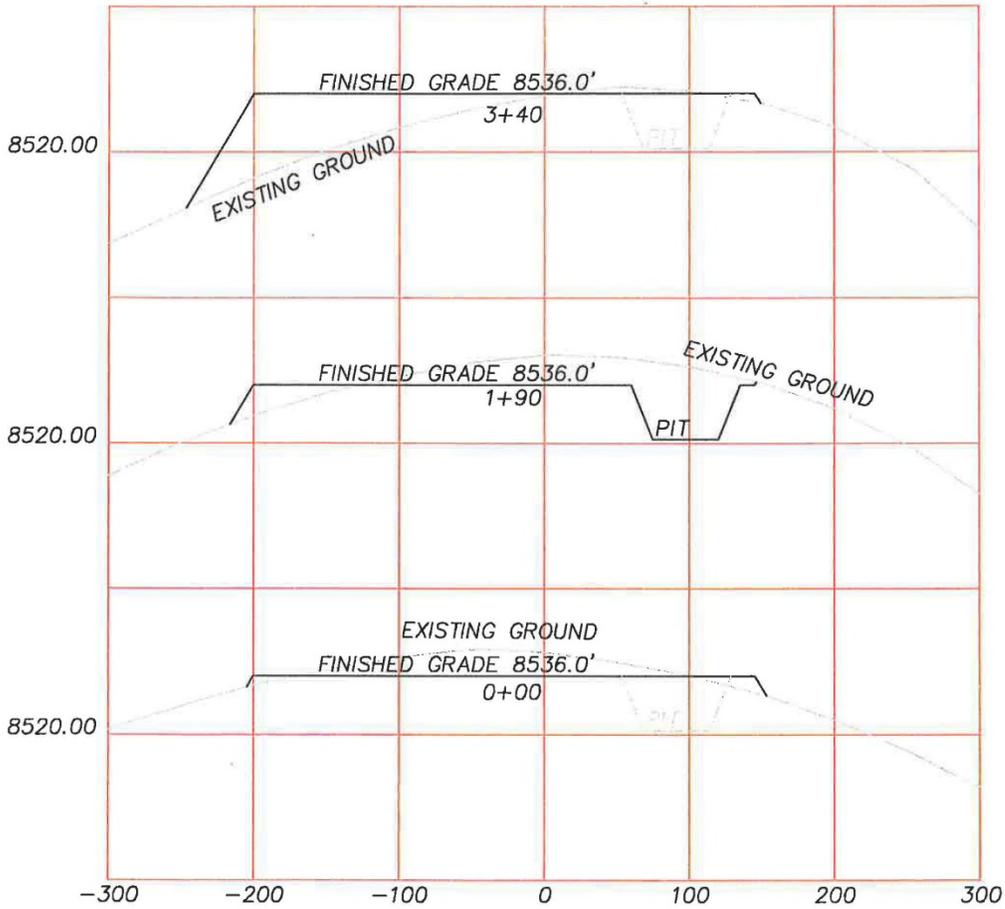
LOCATION:
 WELL 697-23A-12
 1830' FEL and 241' FNL
 WELL FALLS WITHIN THE NE/4
 SECTION 23, T6S, R97W, 6TH PM.
 GARFIELD COUNTY, COLORADO
 SHEET 1 OF 4

WILLIAM H. SMITH & ASSOCIATES P.C.
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 MARATHON OIL COMPANY

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640

PAD 697-23A



HORIZONTAL SCALE: 1"=100 FEET
 VERTICAL SCALE: 1"=40.00 FEET

JOB NO. 26099
 06/21/07/CED
 PAD 697-23A/PAD697-23A.DWG

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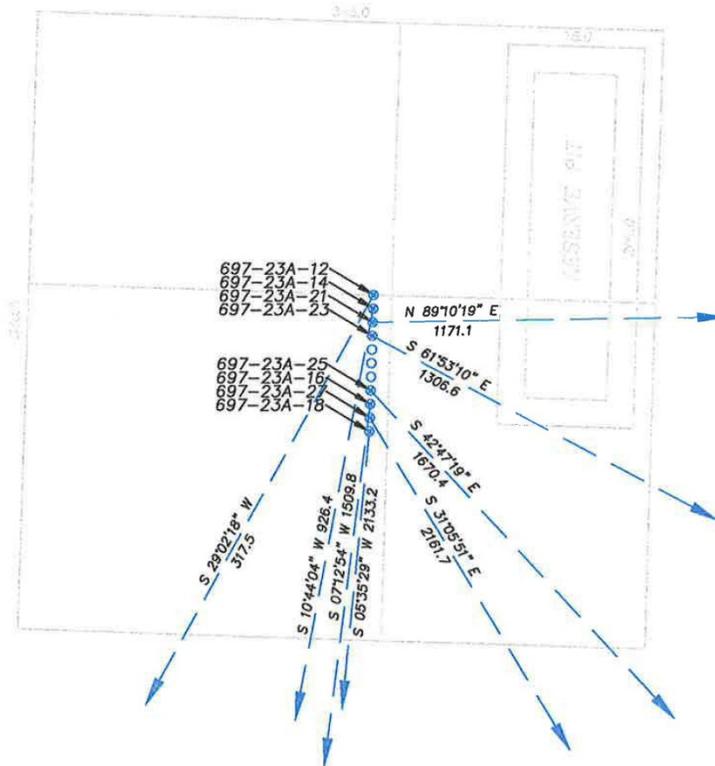
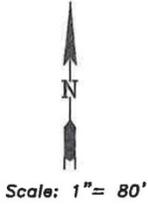
LOCATION:
 PAD 697-23A-12
 WITHIN THE NE/4 SECTION 23, T6S,
 R97W, 6TH PM,
 GARFIELD COUNTY, COLORADO
 SHEET 2 OF 4

WILLIAM H. SMITH & ASSOCIATES P.C.
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 MARATHON OIL COMPANY

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640

PAD 697-23A DIRECTION LAYOUT



RESERVE PIT SIZE
 209' X 75' X 15'
 SLOPE = 1:1
 RESERVE PIT CAPACITY
 31,294 BBLs FULL
 23,369 BBLs WORKING
 CAPACITY WITH 3' FREE BOARD

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PREPARED FOR:
 MARATHON OIL COMPANY
 P.O. Box 3128
 Houston, TX 77253
 5555 San Felipe
 Houston, TX 77056

LOCATION:
 PAD 697-23A
 WELL FALLS WITHIN THE NE/4 SECTION
 23, T6S, R97W, 6TH PM.
 GARFIELD COUNTY, COLORADO
 SHEET 3 OF 4

JOB NO. 26099
 07/30/2007/TLW
 PAD697-23A/PAD697-23A DRILL DIRECTION.DWG

WILLIAM H. SMITH & ASSOCIATES P.C.
 SURVEYING CONSULTANTS
 MARATHON OIL COMPANY

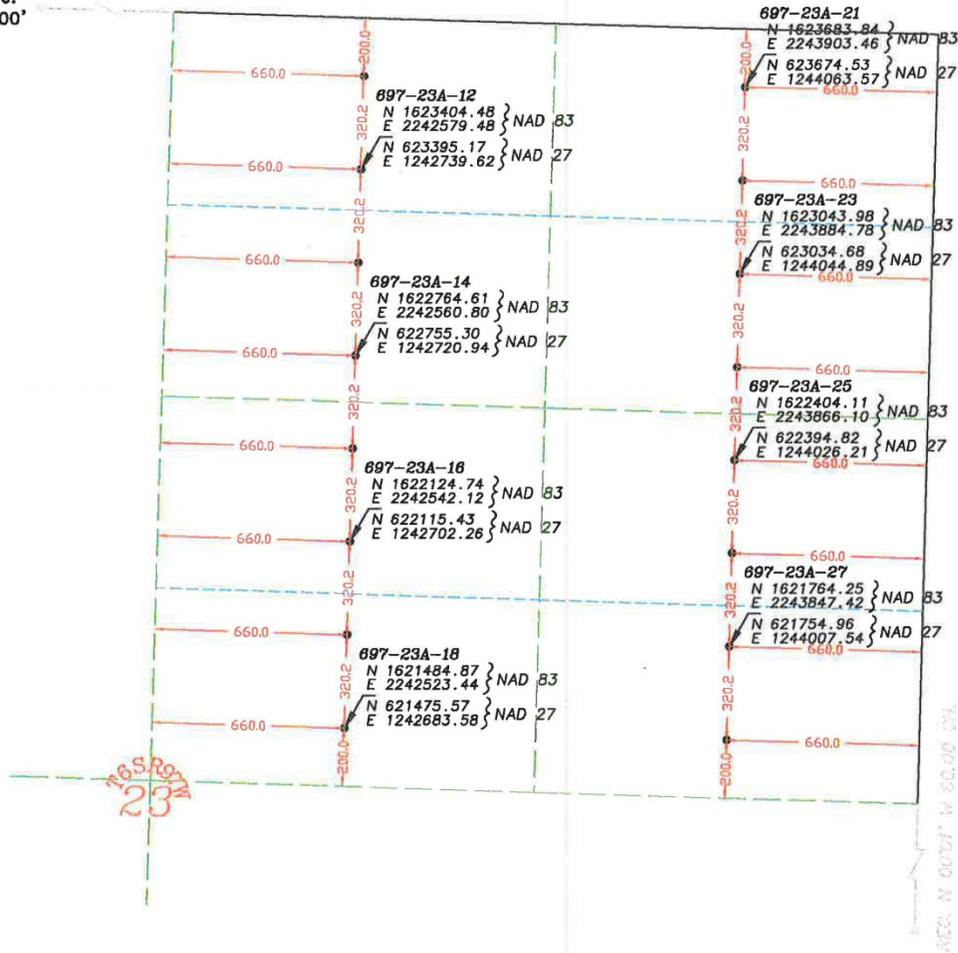
P.O. BOX 820
 GREEN RIVER, WYOMING 82935

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640

BOTTOM HOLE LOCATIONS FOR PAD 697-23A
 NE/4, SECTION 23



MEAS. TO CORNER 50' N 5074.7
 220' N 5074.7 W 78.27 CM.



Coordinates based on Grid
 Colorado State Plane Coordinate
 System Central Zone NAD 83 and
 NAD 27

JOB NO. 26099
 07/30/2007 CED
 PAD 697-23A/PAD697-23A BHL

PREPARED FOR:
 MARATHON OIL COMPANY
 P.O. Box 3128
 Houston, TX 77253
 5555 San Felipe
 Houston, TX 77056

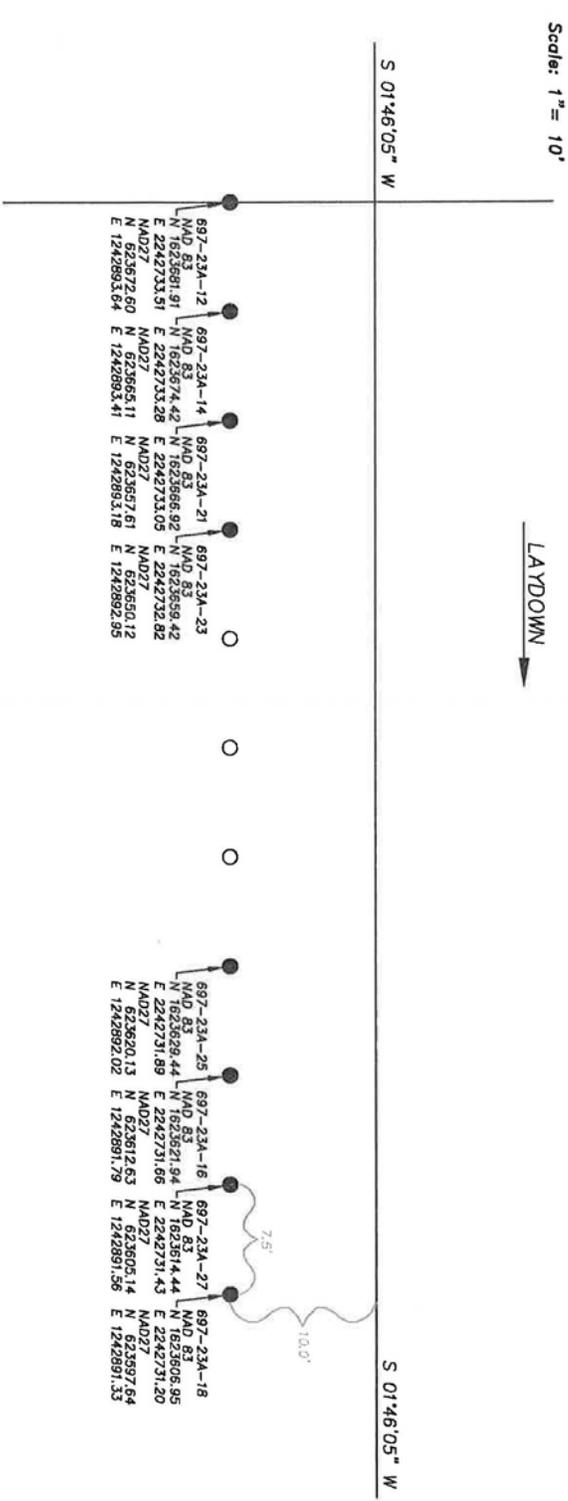
LOCATION:
 BHL FOR PAD 697-23A
 WITHIN THE NE/4 SECTION 23,
 T 6 S, R 97 W, 6TH P.M.
 GARFIELD COUNTY, COLORADO

WILLIAM H. SMITH & ASSOCIATES P.C.
 SURVEYING CONSULTANTS
 MARATHON OIL COMPANY

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

550 EAST 2ND NORTH
 P.H. 307-875-3638
 FAX. 307-875-3640

SURFACE HOLE LOCATIONS FOR PAD 697-23A



Coordinates based on Grid
 Colorado State Plane Coordinate
 System Central Zone NAD 83 and
 NAD 27

JOB NO. 26099
 07/30/2007/CEP
 PAD 697-23A/PAD697-23A SHL.DWG

PREPARED FOR:
 MARATHON OIL COMPANY
 P.O. Box 3128
 Houston, TX 77253
 5555 San Felipe
 Houston, TX 77056

LOCATION:
 SHL FOR PAD 697-23A
 WITHIN THE NE/4 SECTION 23,
 T 6 S, R 97 W, 6TH P.M.,
 GARFIELD COUNTY, COLORADO

WILLIAM H. SMITH & ASSOCIATES P.C.
 SURVEYING CONSULTANTS

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

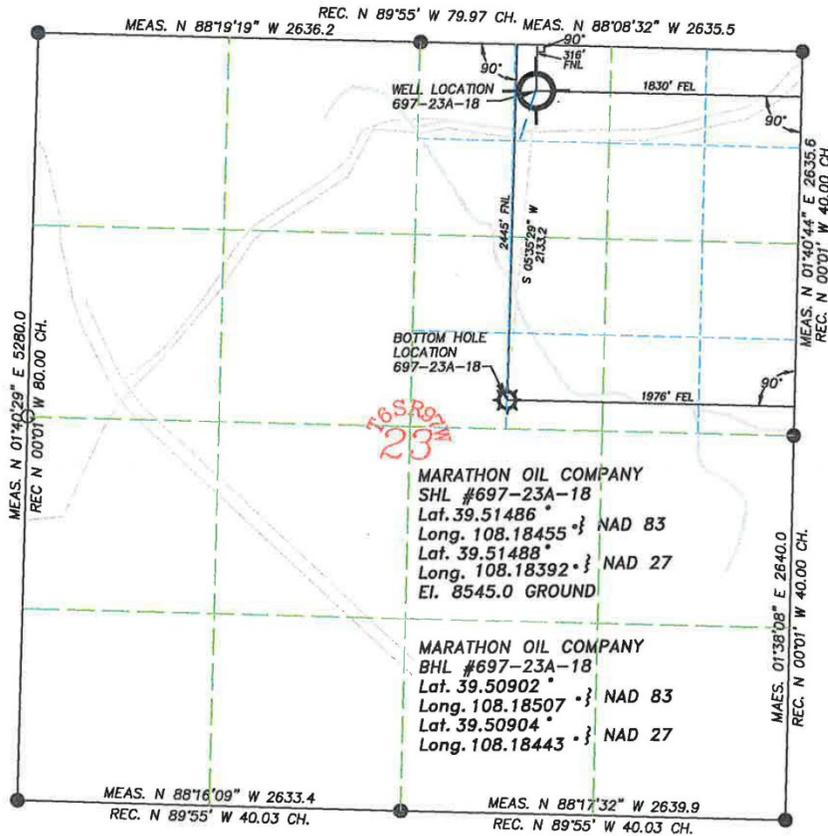
T 6 S R 97 W

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640

PLAT FOR SURFACE AND BOTTOM HOLE LOCATION

Scale: 1" = 1000'

- FOUND GLO SURVEY MARKER
- MONUMENT NOT FOUND OR SEARCHED
- ROADS
- - PIPELINE
- - - PROPOSED PIPELINE

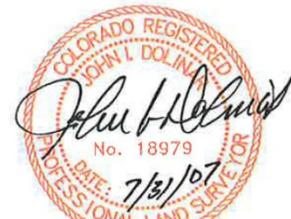


I, John I. Dolinar of Green River, Wyoming hereby certify that in accordance with a request from Frank Krugh for Marathon Oil Company, 5555 San Felipe, Houston, TX 77056. I and or personnel under my direction made a survey on the 26th day of March 2007, for the Surface Hole Location and Elevation of Marathon Oil Company, Well #697-23A-18 being located within the NE/4NW/4NE/4 of Section 23, and the Bottom Hole Location being located within the SE/4SW/4NE/4 of Section 23, T 6 S, R 97 W, of the 6th Principal Meridian, Garfield County, State of Colorado, as shown on the above Section Map.
 Surface Hole Elevation of ungraded ground = 8545.0 feet.
 Datum based on Colorado State Plane Coordinate System Central Zone NAD 83.
 Vertical Datum based on NAVD 88 NGS Triangulation Station SHALE.
 Note: Basis of bearings are relative on grid, based from GPS position in project area.
 NOTE: Record bearings as shown are based on the General Land Office survey, as approved on February 24, 1921.

JOB NO. 26099
 07/30/07 CED
 PAD 697-23A/PAD697-23A PLATS.dwg

LEICA GPS GDOP OF 1.5 ON 03/26/07
 IMPROVEMENTS: ROAD
 SURFACE USE: GRAZING: SCRUB OAK
 AND NATURAL GROUND

697-23A-18



~SEAL~

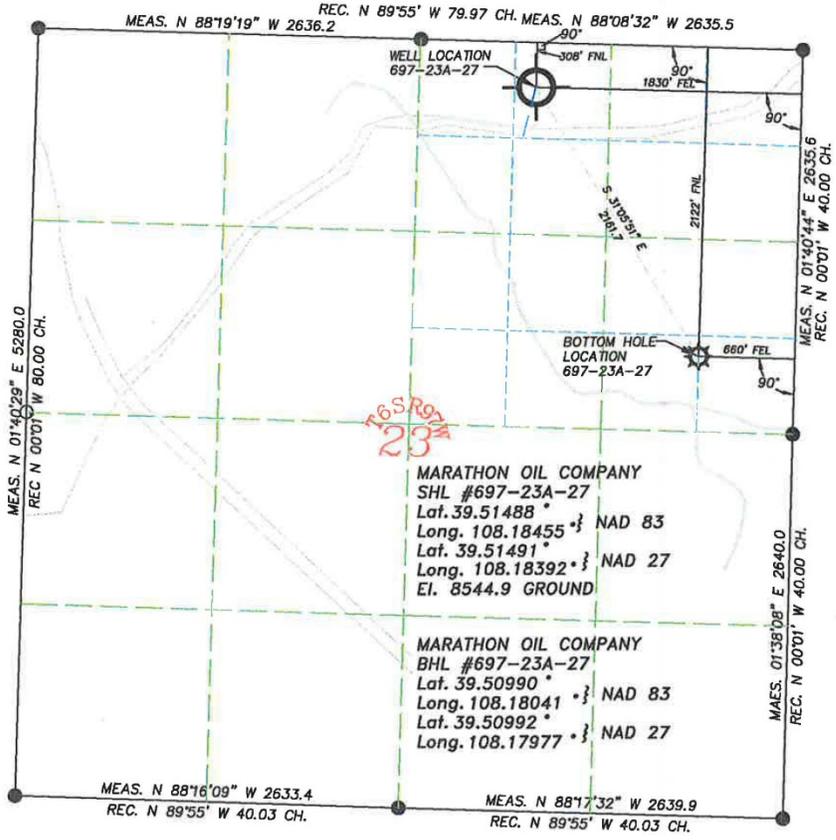
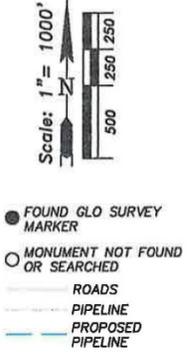
WILLIAM H. SMITH & ASSOCIATES P.C.
 SURVEYING CONSULTANTS

T 6 S R 97 W

PLAT FOR SURFACE AND BOTTOM HOLE LOCATION

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640



I, John I. Dolinar of Green River, Wyoming hereby certify that in accordance with a request from Frank Krugh for Marathon Oil Company, 5555 San Felipe, Houston, TX 77056. I and or personnel under my direction made a survey on the 26th day of March 2007, for the Surface Hole Location and Elevation of Marathon Oil Company, Well #697-23A-27 being located within the NE/4NW/4NE/4 of Section 23, and the Bottom Hole Location being located within the SE/4SE/4NE/4 of Section 23, T 6 S, R 97 W, of the 6th Principal Meridian, Garfield County, State of Colorado, as shown on the above Section Map.
 Surface Hole Elevation of ungraded ground = 8544.9 feet.
 Datum based on Colorado State Plane Coordinate System Central Zone NAD 83.
 Vertical Datum based on NAVD 88 NGS Triangulation Station SHALE.
 Note: Basis of bearings are relative on grid, based from GPS position in project area.
 NOTE: Record bearings as shown are based on the General Land Office survey, as approved on February 24, 1921.

JOB NO. 26099
 07/30/07 CED
 PAD 697-23A/PAD697-23A PLATS.dwg

LEICA GPS GDOP OF 1.5 ON 03/26/07
 IMPROVEMENTS: ROAD
 SURFACE USE: GRAZING: SCRUB OAK
 AND NATURAL GROUND
 697-23A-27



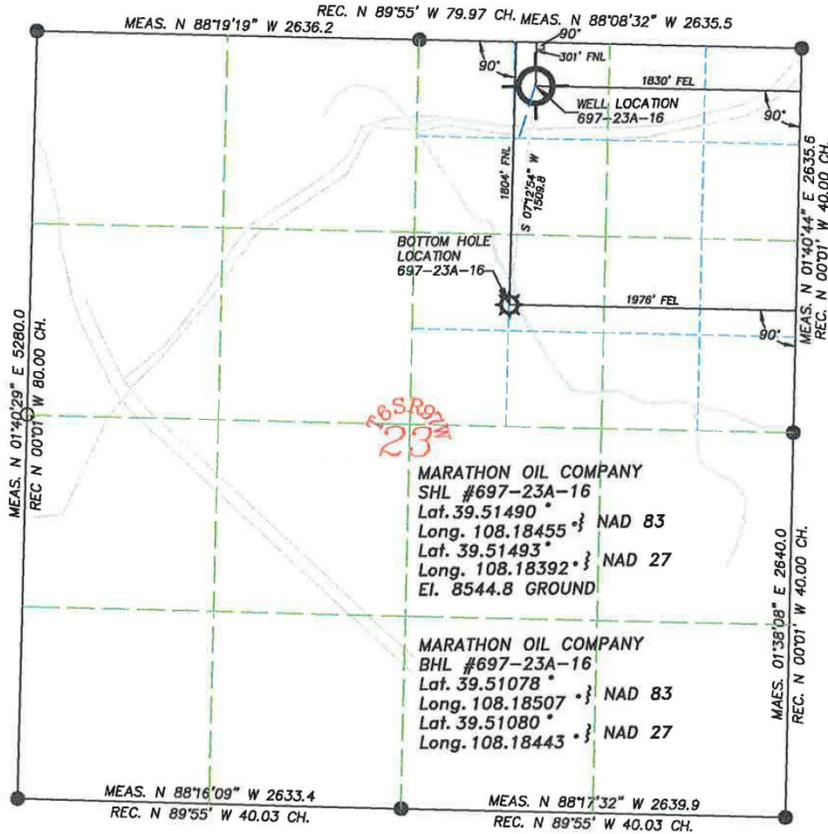
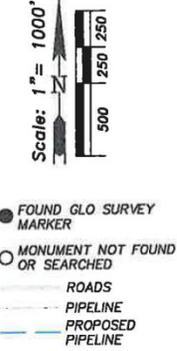
~SEAL~

WILLIAM H. SMITH & ASSOCIATES P.C.
 SURVEYING CONSULTANTS
 T 6 S R 97 W

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640

PLAT FOR SURFACE AND BOTTOM HOLE LOCATION

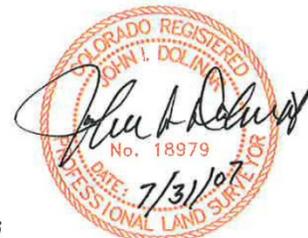


I, John I. Dolinar of Green River, Wyoming hereby certify that in accordance with a request from Frank Krugh for Marathon Oil Company, 5555 San Felipe, Houston, TX 77056. I and/or personnel under my direction made a survey on the 26th day of March 2007, for the Surface Hole Location and Elevation of Marathon Oil Company, Well #697-23A-16 being located within the NE/4NW/4NE/4 of Section 23, and the Bottom Hole Location being located within the NW/4SW/4NE/4 of Section 23, T 6 S, R 97 W, of the 6th Principal Meridian, Garfield County, State of Colorado, as shown on the above Section Map.
 Surface Hole Elevation of ungraded ground = 8544.8 feet.
 Datum based on Colorado State Plane Coordinate System Central Zone NAD 83.
 Vertical Datum based on NAVD 88 NGS Triangulation Station SHALE.
 Note: Basis of bearings are relative on grid, based from GPS position in project area.
 NOTE: Record bearings as shown are based on the General Land Office survey, as approved on February 24, 1921.

JOB NO. 26099
 07/30/07 CED
 PAD 697-23A/PAD697-23A PLATS.dwg

LEICA GPS GDOP OF 1.5 ON 03/26/07
 IMPROVEMENTS: ROAD
 SURFACE USE: GRAZING: SCRUB OAK
 AND NATURAL GROUND

697-23A-16



~SEAL~

WILLIAM H. SMITH & ASSOCIATES P.C.
 SURVEYING CONSULTANTS

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

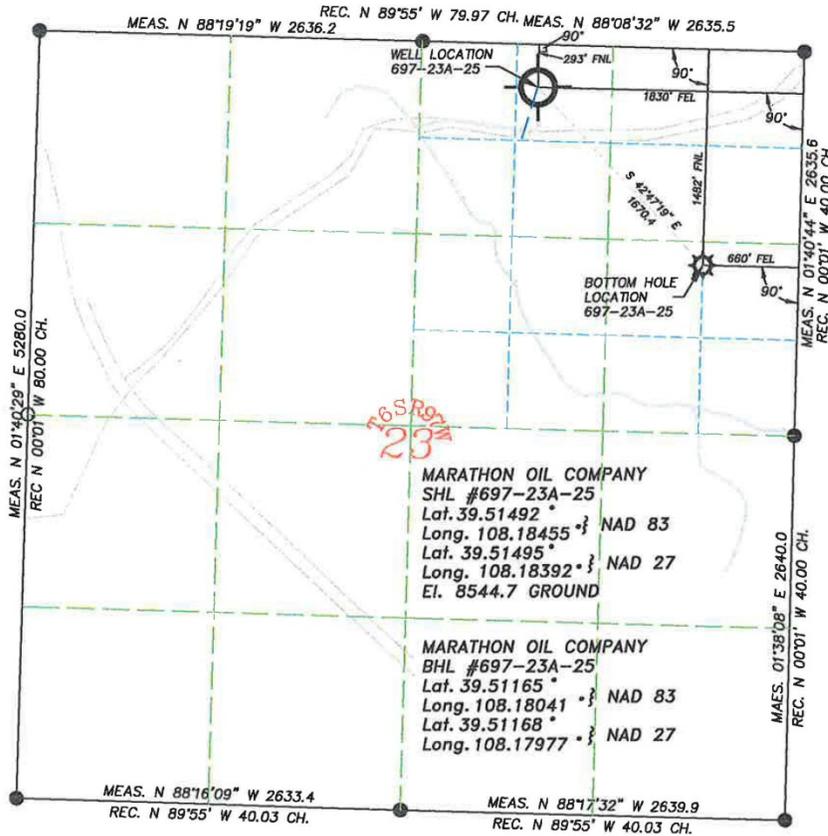
T 6 S R 97 W

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640

PLAT FOR SURFACE AND BOTTOM HOLE LOCATION

Scale: 1" = 1000'

● FOUND GLO SURVEY MARKER
 ○ MONUMENT NOT FOUND OR SEARCHED
 — ROADS
 — PIPELINE
 - - - PROPOSED PIPELINE

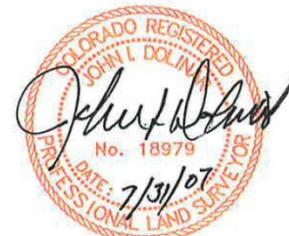


I, John I. Dolinar of Green River, Wyoming hereby certify that in accordance with a request from Frank Krugh for Marathon Oil Company, 5555 San Felipe, Houston, TX 77056. I and or personnel under my direction made a survey on the 26th day of March 2007, for the Surface Hole Location and Elevation of Marathon Oil Company, Well #697-23A-25 being located within the NE/4NW/4NE/4 of Section 23, and the Bottom Hole Location being located within the NW/4SE/4NE/4 of Section 23, T 6 S, R 97 W, of the 6th Principal Meridian, Garfield County, State of Colorado, as shown on the above Section Map.
 Surface Hole Elevation of ungraded ground = 8544.7 feet.
 Datum based on Colorado State Plane Coordinate System Central Zone NAD 83.
 Vertical Datum based on NAVD 88 NGS Triangulation Station SHALE.
 Note: Basis of bearings are relative on grid, based from GPS position in project area.
 NOTE: Record bearings as shown are based on the General Land Office survey, as approved on February 24, 1921.

JOB NO. 26099
 07/30/07 CED
 PAD 697-23A/PAD697-23A PLATS.dwg

LEICA GPS GDOP OF 1.5 ON 03/26/07
 IMPROVEMENTS: ROAD
 SURFACE USE: GRAZING: SCRUB OAK
 AND NATURAL GROUND

697-23A-25



~SEAL~

WILLIAM H. SMITH & ASSOCIATES P.C.
 SURVEYING CONSULTANTS

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

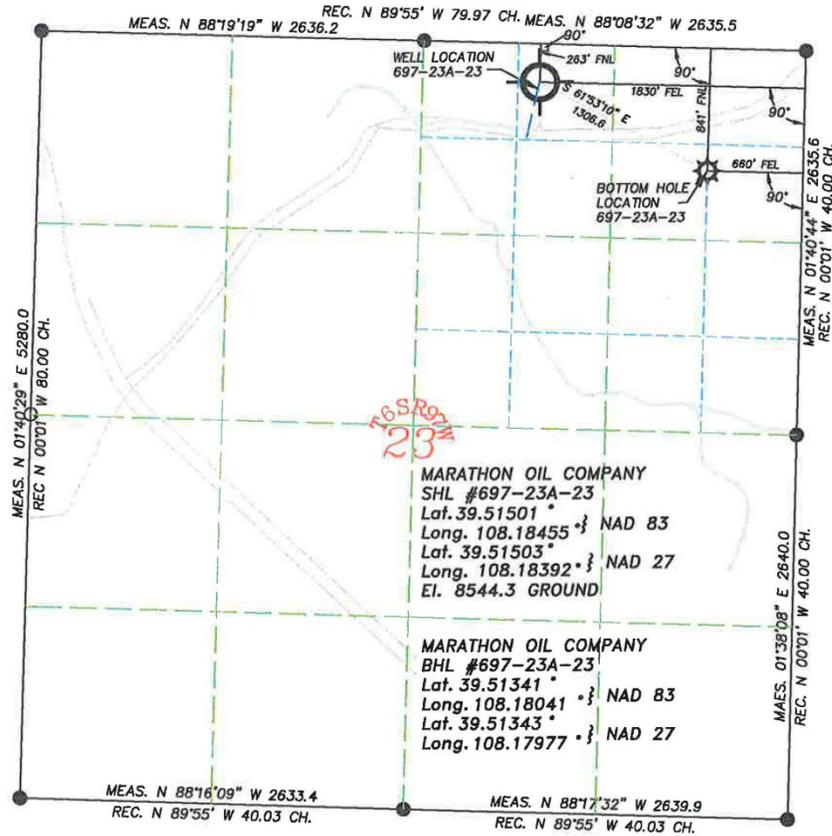
T 6 S R 97 W

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640

PLAT FOR SURFACE AND BOTTOM HOLE LOCATION

Scale: 1" = 1000'

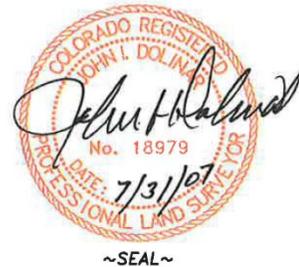
- FOUND GLO SURVEY MARKER
- MONUMENT NOT FOUND OR SEARCHED
- ROADS
- - PIPELINE
- - - PROPOSED PIPELINE



I, John I. Dolinar of Green River, Wyoming hereby certify that in accordance with a request from Frank Krugh for Marathon Oil Company, 5555 San Felipe, Houston, TX 77056. I and or personnel under my direction made a survey on the 26th day of March 2007, for the Surface Hole Location and Elevation of Marathon Oil Company, Well #697-23A-23 being located within the NE/4NW/4NE/4 of Section 23, T 6 S, R 97 W, of the 6th Principal Meridian, Garfield County, State of Colorado, as shown on the above Section Map.
 Surface Hole Elevation of ungraded ground = 8544.3 feet.
 Datum based on Colorado State Plane Coordinate System Central Zone NAD 83.
 Vertical Datum based on NAVD 88 NGS Triangulation Station SHALE.
 Note: Basis of bearings are relative on grid, based from GPS position in project area.
 NOTE: Record bearings as shown are based on the General Land Office survey, as approved on February 24, 1921.

JOB NO. 26099
 07/30/07 CED
 PAD 697-23A/PAD697-23A PLATS.dwg

LEICA GPS GDOP OF 1.5 ON 03/26/07
 IMPROVEMENTS: ROAD
 SURFACE USE: GRASS, SCRUB OAK
 AND NATURAL GROUND
 697-23A-23



WILLIAM H. SMITH & ASSOCIATES P.C.
 SURVEYING CONSULTANTS

T 6 S R 97 W

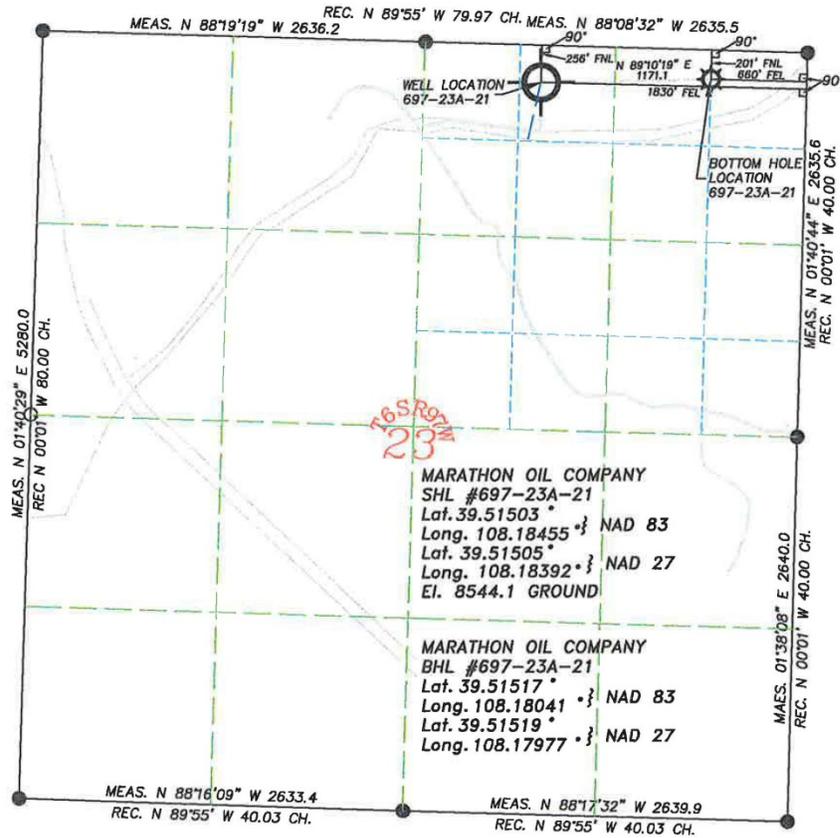
PLAT FOR SURFACE AND BOTTOM HOLE LOCATION

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640

Scale: 1" = 1000'

- FOUND GLO SURVEY MARKER
- MONUMENT NOT FOUND OR SEARCHED
- ROADS
- - - PIPELINE
- - - PROPOSED PIPELINE



I, John I. Dolinar of Green River, Wyoming hereby certify that in accordance with a request from Frank Krugh for Marathon Oil Company, 5555 San Felipe, Houston, TX 77056. I and or personnel under my direction made a survey on the 26th day of March 2007, for the Surface Hole Location and Elevation of Marathon Oil Company, Well #697-23A-21 being located within the NE/4NW/4NE/4 of Section 23, and the Bottom Hole Location being located within the NW/4NE/4NE/4 of Section 23, T 6 S, R 97 W, of the 6th Principal Meridian, Garfield County, State of Colorado, as shown on the above Section Map.
 Surface Hole Elevation of ungraded ground = 8544.1 feet.
 Datum based on Colorado State Plane Coordinate System Central Zone NAD 83.
 Vertical Datum based on NAVD 88 NGS Triangulation Station SHALE.
 Note: Basis of bearings are relative on grid, based from GPS position in project area.
 NOTE: Record bearings as shown are based on the General Land Office survey, as approved on February 24, 1921.

JOB NO. 26099
 07/30/07 CED
 PAD 697-23A/PAD697-23A PLATS.dwg

LEICA GPS GDOP OF 1.5 ON 03/26/07
 IMPROVEMENTS: ROAD
 SURFACE USE: GRAZING: SCRUB OAK
 AND NATURAL GROUND

697-23A-21



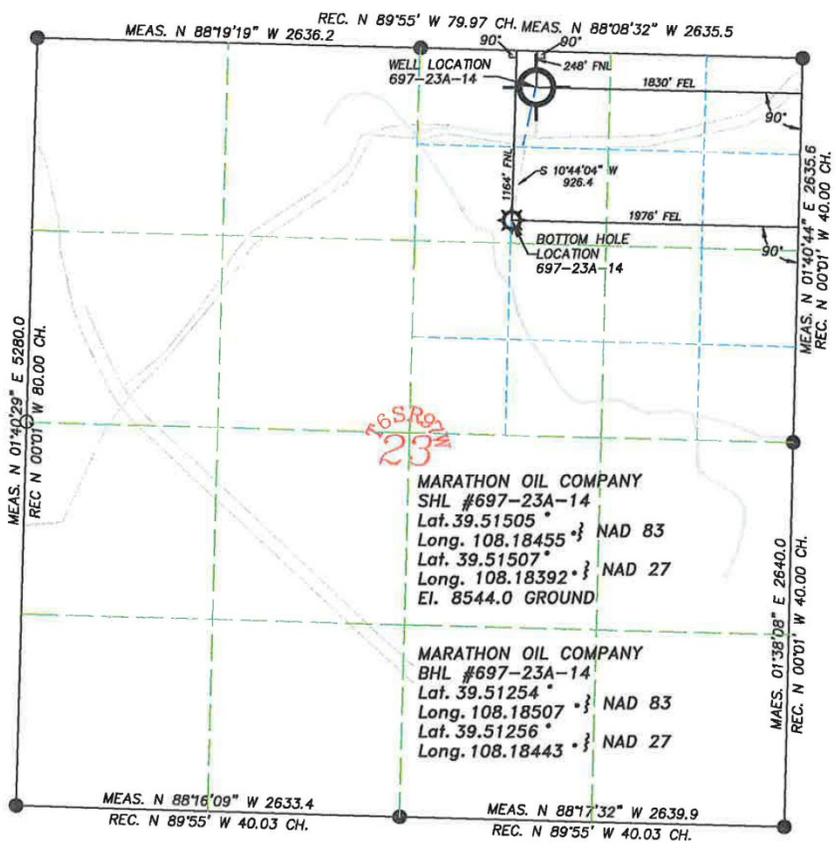
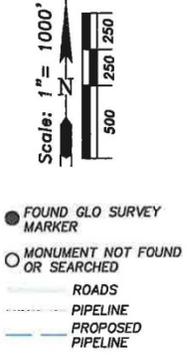
WILLIAM H. SMITH & ASSOCIATES P.C.
 SURVEYING CONSULTANTS

T 6 S R 97 W

PLAT FOR SURFACE AND BOTTOM HOLE LOCATION

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640



I, John I. Dolinar of Green River, Wyoming hereby certify that in accordance with a request from Frank Krugh for Marathon Oil Company, 5555 San Felipe, Houston, TX 77056. I and or personnel under my direction made a survey on the 26th day of March 2007, for the Surface Hole Location and Elevation of Marathon Oil Company, Well #697-23A-14 being located within the NE/4NW/4NE/4 of Section 23, and the Bottom Hole Location being located within the SW/4NW/4NE/4 of Section 23, T 6 S, R 97 W, of the 6th Principal Meridian, Garfield County, State of Colorado, as shown on the above Section Map.
 Surface Hole Elevation of ungraded ground = 8544.0 feet.
 Datum based on Colorado State Plane Coordinate System Central Zone NAD 83.
 Vertical Datum based on NAVD 88 NGS Triangulation Station SHALE.
 Note: Basis of bearings are relative on grid, based from GPS position in project area.
 NOTE: Record bearings as shown are based on the General Land Office survey, as approved on February 24, 1921.

JOB NO. 26099
 07/30/07 CED
 PAD 697-23A/PAD697-23A PLATS.dwg

LEICA GPS GDOP OF 1.5 ON 03/26/07
 IMPROVEMENTS: ROAD
 SURFACE USE: GRAZING: SCRUB OAK
 AND NATURAL GROUND



~SEAL~

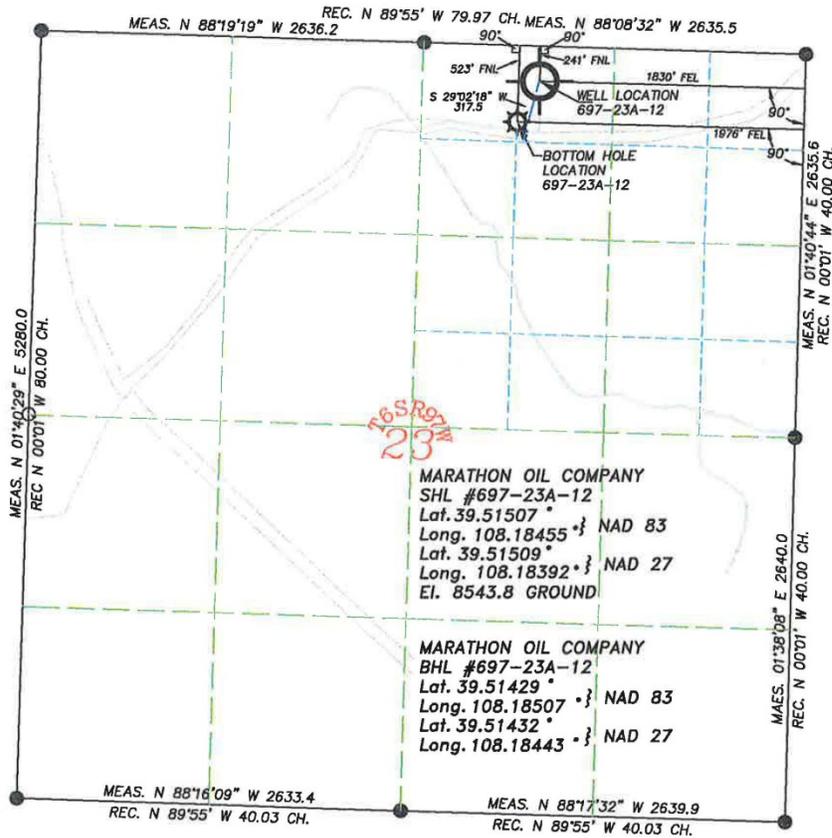
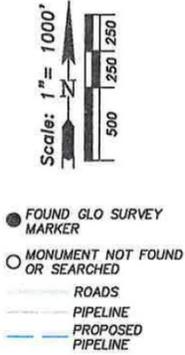
WILLIAM H. SMITH & ASSOCIATES P.C.
 SURVEYING CONSULTANTS

T 6 S R 97 W

PLAT FOR SURFACE AND BOTTOM HOLE LOCATION

P.O. BOX 820
 GREEN RIVER, WYOMING 82935

550 EAST 2ND NORTH
 PH. 307-875-3638
 FAX. 307-875-3640



I, John I. Dolinar of Green River, Wyoming hereby certify that in accordance with a request from Frank Krugh for Marathon Oil Company, 5555 San Felipe, Houston, TX 77056. I and or personnel under my direction made a survey on the 26th day of March 2007, for the Surface Hole Location and Elevation of Marathon Oil Company, Well #697-23A-12 being located within the NE/4NW/4NE/4 of Section 23, and the Bottom Hole Location being located within the NE/4NW/4NE/4 of Section 23, T 6 S, R 97 W, of the 6th Principal Meridian, Garfield County, State of Colorado, as shown on the above Section Map.
 Surface Hole Elevation of ungraded ground = 8543.8 feet.
 Datum based on Colorado State Plane Coordinate System Central Zone NAD 83.
 Vertical Datum based on NAVD 88 NGS Triangulation Station SHALE.
 Note: Basis of bearings are relative on grid, based from GPS position in project area.
 NOTE: Record bearings as shown are based on the General Land Office survey, as approved on February 24, 1921.

JOB NO. 26099
 07/30/07 CED
 PAD 697-23A/PAD697-23A PLATS.dwg

LEICA GPS GDOP OF 1.5 ON 03/26/07
 IMPROVEMENTS: ROAD
 SURFACE USE: GRAZING: SCRUB OAK
 AND NATURAL GROUND

697-23A-12



~SEAL~

4.2 MOC BMP's for Piceance Basin

Marathon Oil Company BMPs Updated August 2014

Marathon has established an evaluation process for operations within the Piceance Basin that addresses wildlife concerns. This listing of items 1-6 represents our specific actions that are considered avoidance and minimization actions by the Colorado Parks and Wildlife (CPW). Marathon has developed these BMPs as part of our Standard Operating Procedures (SOP) to provide operational and wildlife management for the Piceance Basin.

1. Riparian Area Protection for Wildlife
 - Marathon will locate roads as far from riparian areas and bottoms of drainages as possible and outside of riparian habitat. However, Marathon is limited in areas where landowners dictate utilization of roads.
2. Company Vehicle Guidelines and Traffic Reductions for Wildlife Protection
 - Marathon has a 20 mph limit for the Garden Gulch Road, and 25 mph limit for the Garden Gulch Extension road and lease roads (speed limit signs are posted); additionally it is Marathon's policy to prohibit the use of radios/cell phones while driving to enhance driving awareness. Car pooling for major projects is encouraged for all Marathon contractors to reduce traffic; carpooling is evaluated and used where practical for major projects.
 - Marathon utilizes SCADA/Automation system to better understand and operate wellsite operations. The SCADA/Automation system provides a real-time view of the site with the ability to remotely start-up and shut-down certain operations. The system can be used to eliminate unnecessary trips to the production pad. Marathon currently has twenty-two pads in production and all pads are monitored by the SCADA/Automation system. The SCADA/Automation is a key component to safe, efficient, and environmentally friendly operations.
 - When actively drilling, Marathon utilizes one Temporary Living camp to house the resources needed to support the drilling operations within the Piceance Basin. The site supports approximately 50 personnel that function on 12-hour shifts. The shift work schedule is 2-weeks on and 2-weeks off. This is a traffic reduction of 25 vehicles per day, 7-days per week. There is an understanding that the reduction of traffic as a whole reduces the opportunity for wildlife impacts.
3. Infrastructure Layout for Wildlife Protection
 - Marathon has installed consolidated and centralized fluid collection facilities and water pipelines to manage fluids in the field. Through 2011, Marathon has installed approximately 50 miles of pipelines to manage existing production as well as future developments. The majority of the water pipelines are located adjacent to existing roads and within existing ROWs. The installation of most of the water pipelines was performed in conjunction with the installation of gas gathering lines performed by Enterprise. During the installation, both Marathon and Enterprise utilized the same contractor to reduce the overall disturbance and traffic by making one ground disturbance; thereby, reducing manpower, pieces of equipment and installation schedule.
 - From 2008 through 2011, Marathon has utilized the fluid infrastructure to move approximately 2.2 million barrels of water throughout the field. The use of the

pipelines and central facilities has saved approximately 22,000 truck loads and over 330,000 trucking miles. As Marathon continues to produce from this field, there will be continued utilization of this infrastructure to manage fluids which will continue to reduce disturbances and traffic. Produced water can be pumped via pipeline to Pad 18A for storage and offsite disposal. Produced water can be pumped via pipeline to Pad 32C for storage and enhanced evaporation. The use of Pads 18A and 32C for managing produced water effectively minimizes truck traffic within the field.

- Based on development to date, future development of the field will utilize the infrastructure that has been installed. Each future well requires approximately 25,000 barrels of water to drill and complete. The water trucks used for transport carry approximately 100 barrels per load. As a result, continuing to utilize the infrastructure will save up to 250 truck loads per well during future development. Total development will require an average of eight wells per pad to achieve 20 acre spacing. This equates to 2,000 truck loads per pad and would increase with more aggressive development. As stated earlier, the traffic reduction will continue as long as the wells are producing and the water pipelines and facilities are utilized to manage fluids.

4. Drilling and Completions Operations for the Protection of Wildlife

- Marathon will review annually the scheduled civil construction, drilling and completion activities (Plan of Development [POD]) to avoid portions of SWH, specifically for the GrSG. Additionally, Marathon through the POD will schedule our activities in a effort to avoid and/or minimize operations near and within lek sites, elk production areas and active raptor nests. The POD will be submitted to the CPW by the end of January for each calendar year. This component of the WMP will be a living document. Marathon will utilize C-K Associates, LLC (C-K) as our third party review team jointly with our regulatory compliance group to balance developments and ecological concerns within the Piceance Basin. Marathon's goal during the annual POD scheduling is to avoid at a minimum 66% of the GrSG SWH.
- If for some reason an area cannot be avoided, Marathon will attempt to avoid the timing period associated with the wildlife category of concern.
 - Lek avoidance is from March 1 through May 15 for major activities
 - Elk Production is rotation of production areas on a seasonal basis;
 - 4-mile buffer for GrSG March 1-June 30 (4-months)

Note: there is an overlap of geographical areas between the elk production areas and the 4-mile GrSG buffer area (SWH). In Marathon's effort to meet the timing for an elk production area, we also achieve avoidance for a portion of the 4-mile buffer area.

- Marathon has agreed to seasonal rotation development activities for the elk production areas.
 - As of January 2012, Marathon has closed all drilling reserve pits.
 - No drilling has occurred since June 2010; no completions have occurred since December 2010.
5. Additional Minimizations for Wildlife Protection
- Marathon is following the rule requirements for noise. Regarding raptor perch deterrents, Marathon will provide deterrents in areas where surrounding habitats do not provide natural perches.
 - Marathon joint ownership properties can utilize approved seed mixes and restore disturbed sagebrush. In lease areas the land owner dictates the decision on seed mix and restoration of sagebrush. There are discussions with land owners on decisions

regarding high priority habitat (lek areas and adjacent lands) where sagebrush can be restored. In other areas the approved land owner seed mix would be applied.

- Marathon conducts raptor surveys and utilizes the CPW's approach to evaluate survey data protocols.
6. Additional Awareness for Wildlife Protection
- Marathon requires that each individual (company and contractor) go through orientation prior to working on locations and annually thereafter. Wildlife awareness is discussed.
 - Marathon shares a general site map that includes Marathon locations, roads, personnel contacts, etc. In addition, the map highlights Wildlife Timing Periods and the two lek sites within Marathon's acreage. The map is shared with company employees, contractors, and other operators.
 - Marathon conducts monthly HES (health, environment and safety) meetings that include company and contract employees. At least one meeting per year focuses on wildlife issues.