

State of Colorado
Oil and Gas Conservation Commission

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FOR OGCC USE ONLY

SITE INVESTIGATION AND REMEDIATION WORKPLAN

This form shall be submitted to the Director for approval prior to the initiation of site investigation and remediation activities. Form 27 is intended to be used whenever possible. Additional documentation will be required when large volumes of soil and groundwater have been impacted or involve large facilities with multiple source areas. See Rule 910. Attach as many pages as needed to fully describe the proposed work.

OGCC Employee:

Spill Complaint
Inspection NOAV

Tracking No:

CAUSE OF CONDITION BEING INVESTIGATED AND REMEDIATED

Spill or Release Plug & Abandon Central Facility Closure Site/Facility Closure Other (describe): _____

OGCC Operator Number: _____	Contact Name and Telephone: _____
Name of Operator: _____	_____
Address: _____	No: _____
City: _____ State: _____ Zip: _____	Fax: _____
API Number: _____	County: _____
Facility Name: _____	Facility Number: _____
Well Name: _____	Well Number: _____
Location: (QtrQtr, Sec, Twp, Rng, Meridian): _____ Latitude: _____ Longitude: _____	

TECHNICAL CONDITIONS

Type of Waste Causing Impact (crude oil, condensate, produced water, etc.): _____

Site Conditions: Is location within a sensitive area (according to Rule 901e)? Y N If yes, attach evaluation.

Adjacent land use (cultivated, irrigated, dry land farming, industrial, residential, etc.): _____

Soil type, if not previously identified on Form 2A or Federal Surface Use Plan: _____

Potential receptors (water wells within 1/4 mi, surface waters, etc.): _____

Description of Impact (if previously provided, refer to that form or document):

Impacted Media (check):	Extent of Impact:	How Determined:
Soils	_____	_____
Vegetation	_____	_____
Groundwater	_____	_____
Surface Water	_____	_____

REMEDIATION WORKPLAN

Describe initial action taken (if previously provided, refer to that form or document):

Describe how source is to be removed:

Describe how remediation of existing impacts is to be accomplished, including removal and disposal at an injection well or licensed facility, land treatment on site, removal of impacted groundwater, insitu bioremediation, burning of oily vegetation, etc.:



Tracking Number: _____
Name of Operator: _____
OGCC Operator No: _____
Received Date: _____
Well Name & No: _____
Facility Name & No: _____

REMEDIATION WORKPLAN (Cont.)

If groundwater has been impacted, describe proposed monitoring plan (# of wells or sample points, sampling schedule, analytical methods, etc.):

Describe reclamation plan. Discuss existing and new grade recontouring; method and testing of compaction alleviation; and reseeding program, including location of new seed, seed mix and noxious weed prevention. Attach diagram or drawing. Use additional sheet for description if required.

Attach samples and analytical results taken to verify remediation of impacts. Show locations of samples on an onsite schematic or drawing.

Is further site investigation required? Y N If yes, describe:

Final disposition of E&P waste (landtreated and disposed onsite, name of licensed disposal facility, recycling, reuse, etc.):

IMPLEMENTATION SCHEDULE

Date Site Investigation Began: _____ Date Site Investigation Completed: _____ Date Remediation Plan Submitted: _____
Remediation Start Date: _____ Anticipated Completion Date: _____ Actual Completion Date: _____

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: _____ Signed: _____

Title: _____ Date: _____

OGCC Approved: _____ Title: _____ Date: _____



300 E. Mineral Ave., Suite 10
Littleton, Colorado 80122-2655
303/781-8211 303/781-1167 Fax

April 19, 2010

Summary:

On March 30, 2010, soil samples from the reserve pit on the Bledsoe 14-20-5-44 (API# 05-125-11325), operated by Omimex Petroleum Inc., were collected by Daniel Soucy of Buys & Associates. This site was sampled in order to ensure that Omimex is meeting the requirements set forth by the COGCC to close the pits and begin site remediation. Form 27 (site investigation and remedial work plan) will be completed and submitted for this site prior to starting any pit remediation work.

Samples were collected at four locations in the pit, near each of the corners, and from a depth of about three feet below the base of the pit (see attached site map). These four samples were then mixed together, forming one composite sample. This composite sample was analyzed for the parameters listed on Table 910-1 of the Colorado Oil and Gas Conservation Commission (COGCC) 900 Series Rules.

In addition, two background soil samples were collected and analyzed for metals and pH only.

Tables 1-3 below summarize the analytical results.

Table 1. Summary of Analytical Results for Metals for Pit Soil Samples

Parameter	Sample ID			COGCC Limit
	Bledsoe 14-20-5-44	Background Site 1	Background Site 2	
Arsenic	1.6	<0.33	<0.33	0.39
Barium	120	36	45	15000
Cadmium	0.32	ND	ND	70
Chromium (III)	15	ND	ND	120,000
Chromium (IV)	ND UJ	ND	ND	23
Copper	9.3	2.4	2.6	3,100
Lead	9.8	3.4	3.8	400
Mercury	ND	ND	ND	23
Nickel	12	1.8	1.8	1,600
Selenium	3.0	ND	ND	390
Silver	ND	ND	ND	390
Zinc	27	9.0	9.9	23000

All units in mg/Kg

UJ = Not detected at an estimated detection limit

ND – Not detected

Values in Bold exceed the COGCC Allowable Concentration

Arsenic exceeded the COGCC allowable concentration at the Bledsoe 14-20-5-44 site. All other metals were reported as not detected or below the COGCC limits.

Table 2. Summary of Analytical Results for Inorganics for Pit Soil Samples

Parameter	Sample ID			COGCC Limit
	Bledsoe 14-20-5-44	Back 1	Back 2	
Electrical Conductivity	1.300	NM	NM	<4 or 2x background
Sodium Adsorption Ratio	16	NM	NM	12
pH	8.30 J	8.20 J	6.60 J	6-9

NM – Not Measured

Electrical Conductivity is measured in mmhos/cm

J = Estimated Quantity

Values in Bold exceed the COGCC Allowable Concentration

The Sodium Adsorption Ratio exceeded the allowable limit set by the COGCC. The other parameters were within range of the limits.

Table 3. Summary of Analytical Results for Organics for Pit Soil Samples

Parameter	Bledsoe 14-20-5-44	COGCC Limit
TPH (1)	26	500
Benzene	0.0035	0.17
Xylenes (total)	ND	175
Acenaphthene	ND	1,000
Anthracene	ND	1,000
Benzo(A)anthracene	ND	0.22
Benzo(B)fluoranthene	ND	0.22
Benzo(K)fluoranthene	ND	2.2
Benzo(A)pyrene	ND	0.022
Chrysene	ND	22
Dibenzo(A,H)anthracene	ND	0.022
Ethylbenzene	0.0027	100
Fluoranthene	ND	1,000
Fluorene	ND	1,000
Indeno(1,2,3,C,D)pyrene	ND	0.22
Napthalene	ND	23
Pyrene	ND	1,000
Toluene	ND	85
Xylenes (total)	ND	175

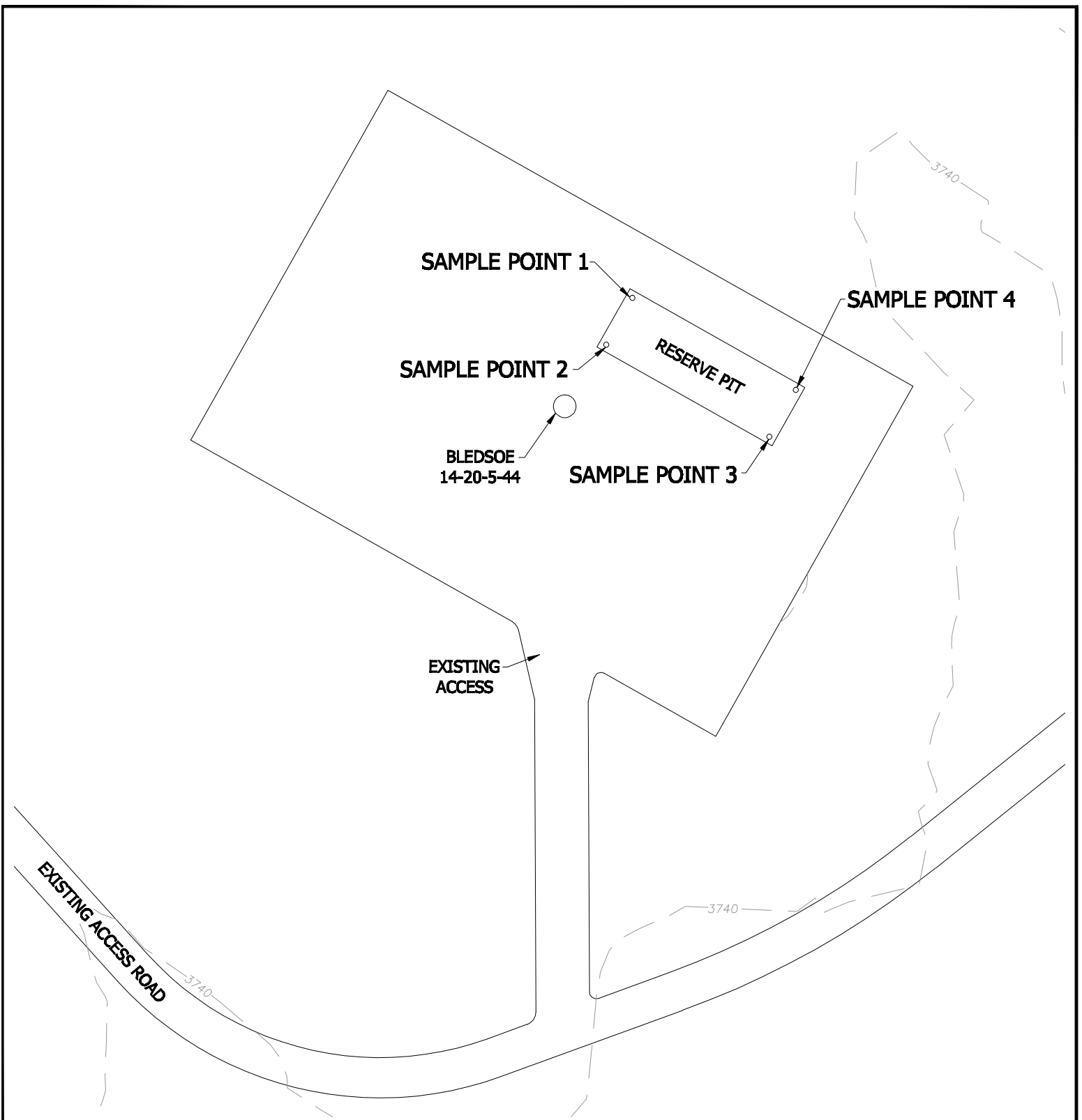
All measurements in mg/Kg


--- no applicable standard

ND – Not detected

(1) Combined result for Low Fraction (gasoline range) and High Fraction (Diesel range)

All organics were reported as not detected or were below the COGCC limits.



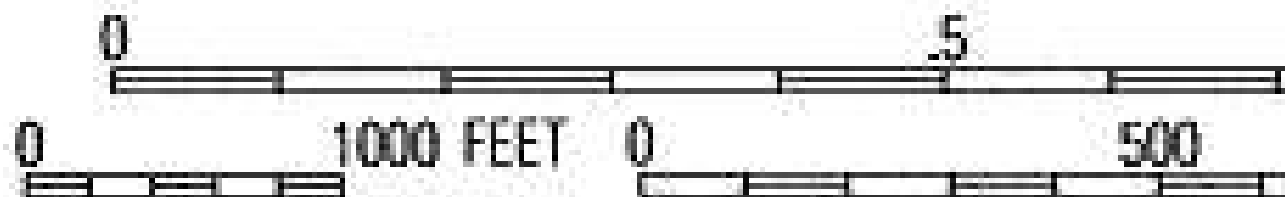
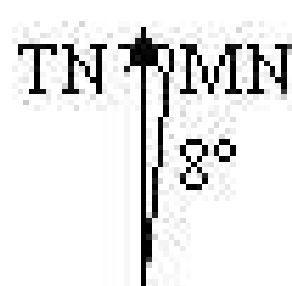
	SAMPLE POINTS	
	BLED SOE 14-20-5-44 Omimex Petroleum Inc. Yuma County, Colorado	
M.G.	APRIL 2010	Note: This drawing represents approximate sizes and distances.
B & A Buys & Associates, Inc. Environmental Consultants		

Map printed on 04/13/10 from "Soil Sample 3-30"

WGS84 102°18'00" W



WGS84 102°18'00" W



Map created with TOPO!® ©2003 National Geographic (