## DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: Scheduled Inspection

FACILITY: QUICKSILVER RESOURCES INC OSBORNE 1-15 WELL SITE		SRN / ID: N7848
LOCATION: SE 1/4 SECTION 15 T24N R13W, CLEON TWP		DISTRICT: Cadillac
CITY: CLEON TWP		COUNTY: MANISTEE
CONTACT:		ACTIVITY DATE: 10/15/2013
STAFF: Caryn Owens	COMPLIANCE STATUS: Compliance	SOURCE CLASS:
SUBJECT: Field Inspection and	d Records Review to determine compliance with Perm	it 262-07.
RESOLVED COMPLAINTS:		

On Tuesday, October 15, 2013, Ms. Caryn E. Owens of the DEQ-AQD conducted a scheduled inspection of the Breitburn Operating - Osborn 1-15 site located on Read Road in Cleon Township, Manistee County, Michigan (SRN: N7848). The field inspection and records review were conducted to determine compliance with Permit to install (PTI) 262-07. During the field inspection it was cloudy and approximately 50°F, with calm winds. During an occasional breeze the wind appeared to be from the east.

The site consists of one metal out-building that contained a soil vapor extraction (SVE) unit, and one small, three sided shed structure that was used for minor storage. The remainder of the site was vacant with fenced areas and well heads north of the building. A white PVC stack was coming out of the northern portion of the building in a vertical direction, and was approximately 20 feet above ground surface. An exhaust-like noise could be heard coming from the stack, but the building could not be accessed because the doors were locked. Based on a site plan and a photo of the SVE system, there appeared to be only the SVE system inside the building on site. No visible emissions or odors were present during the inspection.

# Compliance Evaluation:

**FG-REMEDIATION:** SVE system consisting of nine deep wells and six shallow and intermediate wells which are connected by a single manifold serviced by vacuum blowers. Blower 1 connected to the manifold servicing the deep wells and Blower 2 connected to the manifold servicing the shallow and intermediate wells. The manifolds are connected to one discharge stack.

**<u>I.1-3 Emission Limits</u>**: Based on the analytical results reviewed, the emission limits for Total VOCs, Total Gasoline, and BTEX were not detected above method detection limits.

II. Material Limits: Not applicable for FG-REMEDIATION.

### III. Process/Operational Restrictions:

**III.1:** The site formerly used a SVE system with activated carbon during the initial start-up period. However, since the emissions were so low the system has operated without control.

IV. and V. Design/Equipment Parameters and Testing/Sampling: Not applicable for FG-REMEDIATION.

### VI. Monitoring/Recordkeeping:

VI.1: The site does not contain an air stripper and therefore this condition is not applicable.

VI.2: According to the records reviewed, the quarterly air volume flow rate was 100 cubic feet per minute, and the quarterly VOC, gasoline, and BTEX concentrations at the outlet of the SVE system were non-detect, except for August 12, 2013 where gasoline range organics (GRO) were reported at 0.2 lbs per hour.

VI.3: As stated previously, no control is used for this remediation system, therefore this special condition is not applicable.

VI.4: The records submitted to the DEQ are attached, and are kept in a satisfactory manner.

VI.5: No malfunctions, maintenance, or replacement of the equipment was performed at the site.

VII. Reporting: Not applicable for FG-REMEDIATION.

### VIII. Stack Restrictions

VIII.1: During the field investigation, the stack appeared to be at least 20 feet above ground surface. An exhaust noise appeared to be coming from the stack. However, no visible emissions or odors were present.

#### IX. Other Requirements:

IX: As previously stated, no control is used for the SVE system, and no modifications or additional remediation systems are present at the site.

#### Summary:

According to Mr. Robert M. Koltuniak, of Otwell Mawby, the consultant for the site, emissions of VOCs and BTEX have been non-detect from September 2012 – September 2013. Otwell Mawby is looking at terminating treatment of air emissions in the near future, and conducting verification soil samples for closure of the remediation at the site. Based on the field inspection and records review, the site appears to be in compliance with emissions limits and special conditions outlined in PTI 262-07.

NAME

DATE SUPERVISOR