



C/015/018 Incoming  
CC: Steve D.  
#4589

P.O. Box 310  
15 North Main Street  
Huntington, Utah 84528

May 7, 2014

Utah Coal Regulatory Program  
Division of Oil, Gas and Mining  
1594 North Temple, Suite 1210  
Box 145801  
Salt Lake City, Utah 84114-5801

RECEIVED  
MAY 09 2014  
DIV. OF OIL, GAS & MINING

**RE: NOTICE OF INTENTION TO CONDUCT MINOR COAL EXPLORATION -  
FEDERAL COAL LEASES UTU-88554 AND UTU-06039; PACIFICORP,  
ENERGY WEST MINING CO., EMERY COUNTY, UTAH**

PacifiCorp, by and through its wholly-owned subsidiary, Energy West Mining Company ("Energy West") as mine operator, hereby submits three (3) copies of the Notice of Intention to Conduct Minor Coal Exploration - Federal Coal Leases UTU-88554 and UTU-06039.

The proposed holes are being drilled from the surface into the Deer Creek Mine to be completed as water monitoring wells. The purpose of the wells will be to monitor the depth and quality of ground water that may accumulate within the Mill Fork Area of the mine after mine closure. Two wells each are proposed at two different sites; one well will monitor water depth within the mine and the other will be left open to allow sampling. Due to the potential difficulties anticipated with breaking through into the mine workings from remote surface sites, more holes are proposed than are actually needed.

The proposed drill sites are located within the current Federal Coal Lease UTU-88554, in Section 24, Township 16 South, Range 6 East, and in Federal Coal Lease UTU-06039, in Section 29, Township 16 South, Range 7 East, Salt Lake Base and Meridian. Both drill sites are within the current Deer Creek Permit area. Both drill sites will be accessed using helicopter-supported exploration techniques. Over the past fourteen years, Energy West has successfully utilized helicopter supported drilling in and adjacent to the Mill Fork Lease area. Exploration has been successfully conducted in steep terrain in Rilda Canyon in remote areas where road construction was unfeasible. Energy West has selected the proposed drill hole location to minimize environmental impacts and to maximize hydrologic data. As outlined in the Notice of Intention, no site preparation (building roads or drill pads) will be necessary. Energy West goes to great extents to minimize environmental impacts, including selecting minimal impact drilling techniques, selecting easily reclaimable sites, protecting existing vegetation with a protective cover, selecting drill equipment that can be leveled without excavating the ground, and complete

May 7, 2014

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Notice of Intent to Conduct Minor Coal Exploration - Federal Coal Leases UTU-06039, UTU-88554

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cleanup and reclamation of drill sites.

The drilling will occur on lands in which the surface is administered by the U.S.D.A. Forest Service (USFS) and the subsurface by the Bureau of Land Management (BLM) (see accompanying maps entitled 2014 Surface Drilling, Leases UTU-88554 / UTU-06039 - General Location Maps, Aerial Photos, Surface Ownership Map, Coal Ownership Map, Waterline and Pump Location Map).

The proposed holes will be drilled in Rilda Canyon. Site 2014A, B, C is located at or above the Castlegate Sandstone, in the head of Rilda Canyon. Access to this location will be from the Rilda Canyon staging area (see Raptor Locations, Helicopter Flight Paths and Staging Areas map). Site 2014D, E, F is located below the Castlegate Sandstone, about 1/4 mile upstream from the Rilda Canyon portal facilities. The Rilda Canyon staging area will be the primary site for this drill site as well.

As the potential for closure and sealing of the Mill Fork mining area draws closer, the need for the establishment of this monitoring becomes more urgent. Energy West wishes to be as proactive as possible in characterization of the groundwater issues in this area. Energy West proposes to begin this project on or around July 5, 2014.

If you require any additional information please call me at (435) 687-4712.

Thank you for your assistance in this matter.

Sincerely,



Ken Fleck  
Geology and Environmental Affairs Manager  
Enclosures (3 copies)  
cc: Scott Child (Interwest) w/encl.

**NOTICE OF INTENTION TO CONDUCT  
MINOR COAL EXPLORATION  
FEDERAL COAL LEASE UTU-88554**

**May, 2014**



Energy West Mining Company  
(Mine Operator)



Interwest Mining Company  
(Managing Agent)

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DIV. OF OIL, GAS & MINING

**DRILL PLAN FOR HYDROLOGIC MONITORING HOLES  
IN RILDA CANYON**

**NOTICE OF INTENTION TO CONDUCT  
MINOR COAL EXPLORATION  
FEDERAL COAL LEASE UTU-88554 and UTU-06039**

**May, 2014**

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**(Refer to separate Confidential envelope)**

**NOTICE OF INTENT TO CONDUCT  
MINOR COAL EXPLORATION  
FEDERAL COAL LEASE UTU-88554 AND UTU-06039**

**R645-200. Coal Exploration: Introduction.**

PacifiCorp proposes to drill a total of four (4) hydrologic monitoring holes within the federal coal leases UTU-88554 and UTU-06039 in the year 2014. These drill holes have the designations 2014ABC and 2014DEF. For ease of reference, this plan follows the format of the applicable portions of the Utah Division of Oil, Gas, and Mining (hereinafter referred to as “the Division”) rules (R645-200 through R645-203) regarding Coal Exploration.

**R645-200-100. Scope. (Minor Coal Exploration):**

- 122. Minor Coal Exploration.** PacifiCorp intends to drill up to six (6) 3" diameter holes that will intercept 1 or more coal seams each. The intent is to drill into the Deer Creek Mine workings to install down-hole hydrologic monitoring equipment and install surface telemetry equipment. The drilling will occur on a designated federal coal leases (UTU-88554 and UTU-06039). Less than 250 tons of coal will be removed. PacifiCorp is hereby filing a Notice of Intention to Conduct Minor Coal Exploration under the requirements of R645-201-200.

**R-645-200-200. Responsibilities.**

- 210. Responsibility to Comply with Regulations.** PacifiCorp will comply with the requirements of R645-200 through R645-303.
- 220. Responsibility of the Division to Review and Reply.** The Division will receive and review this Notice of Intention to Conduct Minor Coal Exploration. The Division will review and reply within 15 days.
- 230. Responsibility of the Division to Coordinate with Other Agencies.** The Division will coordinate review of this Notice with the other appropriate government agencies (U.S.D.A. Forest Service, BLM, OSM, etc.). PacifiCorp will provide enough copies of this notice to the Division for distribution to these agencies.

**R645-201. Coal Exploration: Requirements for Exploration Approval.**

**R645-201-100. Responsibilities for Coal Exploration Plan Review.**

- 110. Coal Exploration Plan Review, Responsibility of Division.** The lands on which this exploration will be conducted, being a federal coal lease issued to PacifiCorp and within

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the permit area administered by the Utah Division of Oil, Gas, and Mining, are not subject to 43 CFR Parts 3480-3487, but CFR 30 Part 700.4.c. and Part 772. Therefore, exploration plan review will be the responsibility of the Division.

**120. Requirements of 43 CFR 3480-3487.** N.A.

**130. Division Responsibility to Coordinate with Other Agencies.** This Notice of Intention to Conduct Minor Coal Exploration and Drilling Plan will be submitted to the Division as the lead agency for review and approval.

**R645-201-200. Notices of Intention to Conduct Minor Coal Exploration.**

**210. Division Review Requirement.** Notices of Intention to Conduct Minor Coal Exploration where 250 tons or less of coal will be removed require Division review prior to conducting exploration. PacifiCorp is submitting a drill permit application package as complete as possible, with some of the other regulatory approvals still pending, allowing the Division and other agencies time to review and approve the Notice before exploration activities are scheduled to begin on July 5, 2014.

**220. Required Applicant Information.** This Notice of Intention to Conduct Minor Coal Exploration is required to include the following pertinent information.

**221. Name, Address, and Telephone Number of Applicant:**

**APPLICANT:**

PacifiCorp  
c/o Interwest Mining Company  
1407 W. North Temple St., Suite 310  
Salt Lake City, Utah 84116  
(801) 220-4612

**OPERATOR:**

Energy West Mining Company  
15 North Main Street  
Huntington, Utah 84528

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(435) 687-9821

**222. Name, Address, and Telephone Number of the Applicant's Representatives:**

**RESPONSIBLE REPRESENTATIVE:**

Ken Fleck or Chuck Semborski  
Energy West Mining Company  
15 North Main Street  
P.O. Box 301  
Huntington, Utah 84528  
(435) 687-4712  
(435) 687-4720

**223. Description of Exploration Area.** Narrative and map describing the exploration area and indicating where surface drilling will occur:

**PROPOSED EXPLORATION AREA:**

The proposed drill holes are located within the current federal lease UTU-88554, Section 24, Township 16 South, Range 6 East, and UTU-06039, in Section 29, Township 16 South, Range 7 East, Salt Lake Base and Meridian. The drilling will occur on lands in which the surface is administered by the U.S.D.A. Forest Service (USFS) and the subsurface by the B.L.M. (see accompanying maps entitled Coal Exploration - General Location Maps, Aerial Photos, Surface Ownership Map, Coal Ownership Map, Raptor Locations, Helicopter Flight Paths and Staging Area Map, Waterline and Pump Location Map).

Both sets of proposed holes, 2014A, B, C and 2014D, E, F, will be drilled in Rilda Canyon. Two holes completed as water monitoring wells will be installed at each site. If a hole misses the mine workings, a redrill will be required, thus the extra letter in the proposed hole numbering. The first site 2014A, B, C will be located at or above the Castlegate Sandstone. The second site, 2014D,E,F will be about ½ mile up the right fork of Rilda Canyon from the Rilda Canyon portals, below the Castlegate Sandstone. Access to both of these locations will be from the Rilda Canyon or Mill

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Fork staging areas (see Raptor Locations, Helicopter Flight Paths and Staging Area Map). The Rilda Canyon staging area will be the primary site for helicopter support for the Rilda Canyon drill holes to minimize potential impacts to raptors.

Table 1. Mill Fork Coal Lease Proposed Drilling for 2014:

HOLE NUMBER	LOCATION	ELEVATION (Feet)	DEPTH (Ft)	SURFACE OWNERSHIP	COAL OWNERSHIP
2014A 2014B 2014C, if necessary	2,334' South, 1,563' East of the NW corner of Section 24, T.16S., R. 6 E.	9,760'	1,765'	USFS	Federal Coal Lease UTU-88554
2014D 2014E 2014F, if necessary	997' South, 2,040' East of the NW corner of Section 29, T.16S., R. 7 E.	8,060'	258'	USFS	Federal Coal Lease UTU-06039

**224. Period of Intended Drilling:**

**PROJECT STARTUP DATE:**

<b>Helicopter Supported Drill Hole 2014DEF</b>	<b>July 5, 2014</b>
<b>Helicopter Supported Drill Hole 2014ABC</b>	<b>July 20, 2014</b>

**PROJECT COMPLETION DATE: September 30, 2014**

(If PacifiCorp is unable to complete the number of holes proposed for any reason in 2014, future drilling of the approved sites will adhere to the protection measures for raptors detailed in R645-200-230, future raptor surveys and consultation with USFS, USFWS and DOGM).

It is anticipated that all drilling and reclamation activities associated with this project will be completed within 60 days following the date of implementation.

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- 225. Method of Drilling.** Method of drilling to be used, amount of coal to be removed, and practices to be used to protect the area from adverse impacts and reclaim the area in accordance with R645-202.

Pre-Work Meeting:

A pre-work meeting including the responsible company representatives, contractors, Bureau of Land Management, and the Forest Service will be conducted as required prior to commencement of operations.

**DRILL HOLES #2014A, B, C AND #2014 D, E, F**

The method of drilling to be used for holes 2014A, B, C and 2014D, E, F in Rilda Canyon is helicopter-assisted drilling, in which the primary mode of transportation for drilling equipment and personnel is by helicopter, rather than by road. By using this method, drilling equipment can be transported into the remote area inaccessible by road to conventional drilling rigs, and environmental impact to the surface is minimized. All drills, drilling equipment, and personnel will be transported to the individual drilling sites by helicopter from staging area located on in Rilda Canyon on the existing road (see Raptor Locations, Flight Paths and Staging Areas Map).

Drill Methods & Procedures: The three inch maximum diameter holes will be rotary drilled the entire length to the approximate depth stated previously in the drill hole location and depth table. Drilling depth will be sufficient to accomplish penetration through the Blind Canyon coal seam, and to enter the Deer Creek Mine workings in the Hiawatha seam. At each site, at least two holes will be drilled for the purpose of installing water monitoring wells.

The holes will be drilled with "N" sized plug drilling equipment, yielding a 3" diameter hole into the mine workings. More than one attempt may be necessary to intercept the mine workings; the intent is to have two holes completed into the mine at each location. Holes that do not intercept the mine workings will be immediately abandoned following the procedures below. "B" sized wireline drill rods (2.25" O.D.) will be used as casing and cemented into the "N" sized hole from the mine workings to the surface in stages to assure a good cement seal. The "B" rods will be used for installation of water-level measuring equipment (sounder or piezometer). When the hole is complete, a locked cap will be installed on the casing.

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The drilling will be done by a drilling contractor(s) experienced in helicopter supported drilling. The drills used are diesel powered rotary drill rigs mounted on 6' x 8' skids. Drilling will utilize water and, as necessary, a biodegradable polymer drilling "mud" such as M-I Swaco Poly-Plus (MSDS included in this report).

The following support equipment will be required:

- 3 pickup trucks: stationed at the staging area
- 3 Flatbed trailers for mobilization/de-mobilization of the drill rig
- 1 Lama helicopter and support truck
- 1 Storage trailer to be stationed at the staging area

The drill rig components and associated materials, tools and equipment will be transported by truck to the helicopter staging areas indicated on the accompanying map. The tools and materials and personnel necessary for site preparation will be transported to the drill site by helicopter. Site preparation will include removal of dead-fall and brush as necessary. Minor digging, using hand tools, may be necessary at some locations to achieve effective placement of the leveling support materials (wood blocks, etc.). Brattice or other similar material will be placed on the ground beneath the drill rig. The drill rig is made up of several components which will be transported to the site by helicopter in several "lifts". The drill rig components will then be assembled at the drill site, the rig will be leveled and other necessary materials will be flown to the site.

Drill Hole Access and Pad Construction:

No access road or pad construction will be necessary for the proposed project. Drilling equipment and materials will be transported to the drill site by helicopter. Personnel will access the site by vehicle and helicopter via existing roads and on foot. The drill site is relatively level (30 percent or less slope); therefore, minimal site preparation will be necessary. Vegetation, in the form of trees, grasses, forbs and sparse, low shrubs, will not be removed. However, it may be necessary to remove dead-fall and some "taller" shrubs (mahogany, etc.)/aspen trees for safety reasons. This will be minimized and accomplished using hand tools. The dead-fall will be replaced upon completion of drilling. An area no larger than approximately 40' by 40' will be occupied at the drill site. Leveling of drilling equipment will be accomplished using hand tools and supports (wood blocks, etc.)

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transported to the site by helicopter. All materials, tools and equipment will be removed immediately upon completion of drilling and reclamation activities.

A 1" diameter high-pressure hose will be laid overland from the pump stations to each drill site. This will be accomplished by hand and/or helicopter. No clearing of vegetation will be necessary for placement of the water hose. Existing openings among the trees will be utilized for water line placement. No vegetation clearing will occur at the water tank/pump sites or the helicopter staging areas. Activities will be confined to the existing roads in Rilda Canyon (Emery County road #306).

Amount of Coal to be Removed: As previously discussed, a 3" maximum diameter hole will be rotary drilled for the entire depth of the hole. The hole will penetrate through the Blind Canyon coal seam. This will result in approximately a maximum of 20 pounds of coal being drilled through per hole. No core samples will be extracted.

Practices to Protect from Adverse Impacts and to Reclaim the Area: During drilling, water and drilling fluids will be recirculated to the extent possible. Any returned cuttings and other materials will be captured in a container at the drill site. The cuttings will be transported from the drill site to the staging area by truck to the Deer Creek Waste Rock site for disposal. Containment of possible fluid spills will be achieved through the use of brattice ground cover, silt fence, and if necessary, earthen berms. If spills occur, all affected materials will be removed from the site and disposed of at an approved location. If soil is removed during spill containment and clean-up, the site of removal will be recontoured and seeded with the approved seed mixture.

Fire Suppression Equipment:

All gasoline and diesel powered equipment will be equipped with effective mufflers or spark arresters which meet applicable Forest Service specifications. Fire suppression equipment will be available to all personnel working at the project site. Equipment will include at least one hand tool per crew member consisting of shovels and pulaskis and one properly rated fire extinguisher per vehicle and/or combustion engine.

Fuel and/or lubricating oil containers not stored in a truck will be placed on brattice cloth or other acceptable ground cover at a site located away from

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drainage channels and surrounded by brattice, earthen berm or other acceptable containment structure. If spills occur, clean-up will be conducted as stated above.

Access by personnel associated with the drilling project will be via vehicle to Rilda Canyon and by foot to helicopter assisted drill sites. Therefore, no additional access facilities will be constructed.

Following completion of drilling and cementing of the hole, the drill rig and all associated equipment and materials will be removed and transported from the area by vehicle. The water hose, tanks and pumping station and all associated materials and equipment will be removed. All trash and extraneous materials will be removed from the US Forest Service property and disposed of at an approved location. The sites will be reclaimed by: 1) Removing all trash, cuttings, and contaminated soil. 2) Recontouring site to original contour, and 3) Re-seeding with the approved seed mix.

**R645-202. Coal Exploration: Compliance Duties.**

**R645-202-100. Required Documents.**

“Each person who conducts coal exploration which substantially disturbs the natural land surface will, while in the exploration area, have available a copy of the Notice of Intention to Conduct Minor Coal Exploration...for review by an authorized representative of the Division upon request.”

**Road Use:**

The Forest Service will be notified 48 hours in advance that heavy equipment will be moved onto National Forest System lands and that surface activities will commence.

Rilda Canyon (Emery County road #306): The Rilda Canyon staging area is located at the end of Emery County Road #306.

**Special Use Permit:**

This proposed drill location is located on a federal lease within the existing permit area of the Deer Creek Mine. A U.S. Forest Service Special-Use Permit is not required for drilling. A Special-Use Permit has been applied for to allow the well heads and telemetry equipment to remain on these sites.

**Archeological Information:**

*May, 2014*

*PacifiCorp*

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The proposed location in Rilda Canyon is located on the eastern flank of East Mountain. Using portable equipment intended for helicopter-aided exploration will eliminate the need for any surface excavations. As required by the U.S.D.A. Forest Service, PacifiCorp has contracted EarthTouch, LLC. (Scott Billat) to conduct a Class I file search as well as a Class III pedestrian survey of the proposed 2014 drilling activities. The field archaeological survey is scheduled for May 14, 2014. Findings of the file search and field review will be transmitted to the Forest Service by EarthTouch, LLC. In addition, a copy of the report stamped "confidential" is included with this Notice of Intent.

In the unlikely event that cultural or paleontological resources are discovered during operations, all operations which may result in disturbance to the resources will cease and the Forest Service will be notified as soon as possible of the discovery.

PacifiCorp will make sufficient copies of all surface drilling permit documents, including the Notice of Intent, the Forest Service drilling stipulations, and all applicable road use, special use, and other permit documents at the drill site, and in each field vehicle used during the exploration program, for the duration of the program.

**R645-202-200. Performance Standards.**

- 210. Requirements of the State Program.** All surface drilling and reclamation operations which substantially disturb the natural land surface will be conducted in accordance with the coal exploration requirements of the State Program, and any conditions on approval for exploration and reclamation imposed by the Division.

PacifiCorp will comply with all coal exploration requirements of the State Program, and any conditions on approval of the exploration plan.

- 220. Inspection and Enforcement.** Any person who conducts any coal exploration in violation of the State Program will be subject to the provisions of 40-10-20 of the Act and the applicable inspection and enforcement provisions of the R645 Rules.

PacifiCorp will comply with all coal exploration requirements of the State Program, and any conditions on approval of the exploration plan. PacifiCorp welcomes inspection of its exploration operations at any time during exploration.

- 230. Operational Standards.**

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- 231. Non-Disturbance of Habitats.** Habitats of unique or unusually high value for fish, wildlife, and other related environmental values and critical habitats of endangered or threatened species identified pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et. seq.) will not be disturbed during coal exploration. A copy of the Threatened and Endangered Species list created by the Utah Division of Wildlife Resources (November, 2010) is included as an appendix to this Notice.

The vegetation in the area (refer to Deer Creek MRP, Volume 12, Biology chapter, pages 3-1 through 3-5 and also Map MFS1821D in the Maps Section) consists of a Cottonwood/Aspen/Fir/Dogwood community in the bottom of the canyons and Spruce-Fir Coniferous Forest inter-mixed with aspen communities on the south side slopes and dense Spruce-Fir Coniferous Forest on the north slopes. The primary land uses associated with the area are wildlife habitat, livestock grazing and recreation. The area is presently classified for the following wildlife uses by the Utah Division of Wildlife Resources (DWR):

Mule Deer	High Priority Summer Range
Elk	Critical Winter Range and High Priority Summer Range

The proposed drilling is not expected to have a detrimental impact on any of these species, their habitat or other land uses associated with the area.

Surveys for Threatened, Endangered and Sensitive (TES) plant and animal species have been conducted in connection with various projects in this area and the Mill Fork coal leasing process (refer to Deer Creek MRP, Volume 12, Biology chapter for all information concerning TES species within the Mill Fork Lease area). Results of these surveys have been provided to the various regulatory agencies in the applications for the projects. No TES plants and animals have been found in the area of the proposed drill hole.

Energy West, in cooperation with the Division of Wildlife Resources, conducts annual raptor surveys in and adjacent to mine permit boundaries, including the federal leases UTU-88554 and UTU-06039 (PacifiCorp will submit raptor status upon completion of the annual survey schedule for May 2014 in an separate envelope (stamped confidential) entitled Raptor Location and Status - 2014 Survey Data).

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Raptor activity in Mill Fork Area will be evaluated during May 2014. Based on the previous surveys, the proposed 2014 drill sites located in Rilda Canyon are outside ½ mile protective buffer zones of known nests.

PacifiCorp proposes to commence drilling operations on July 5, 2014 for site 2014DEF (based on the raptor results). To reduce potential raptor impacts, PacifiCorp will comply with the following:

- all non-essential helicopter flights will be conducted at 1000 feet above ground level.
- Rilda Canyon staging area will be considered the primary helicopter staging site.
- drill activity for holes located within any ½ mile buffer zone of active nests will be scheduled after July 15 or after the juvenile(s) have fledged. Prior to mobilization to holes within ½ buffer zone, Energy West will monitor nests activity and transmit the data within 24 hours of the survey to USFS, USFWS and DOGM.

In recent years the surface management agency (Forest Service) has expressed concern related to potential impacts to the Northern Goshawk (management indicator specie for the Manti -La Sal National Forest). As stated in the: State of Utah School and Institutional Trust Lands Administration (SITLA) Access Road on East Mountain Final Environmental Impact Statement prepared by the Forest Service (page 76), *Goshawk nest sites are usually located in dense, mature forests with relatively large trees, near water, and on benches of relatively little slope. On page 78 the Final Environmental Impact Statement states that, "In order to reduce potential direct impacts to the goshawk, known goshawk territories will be monitored prior to implementation of project activity. If a territory is active, no project related activity would occur within a 30-acre buffer around the active nest between March 1 and September 30. In addition, no construction, drilling activity or commercial traffic will be allowed within 0.5 mile of an active goshawk nest between March 1 and August 15, unless a Forest Service biologist determines that the activity would not likely lead to nest abandonment or reduce survival potential for fledglings.*

In past drilling activities associated with the Mill Fork lease, Forest Service biologists have identified two goshawk territories. Proposed drilling activities for 2014 have been situated to eliminate potential impacts to the goshawk territories.

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- 232. Road Construction and Use.** All roads or other transportation facilities used for surface drilling will comply with the applicable provisions of R645-301-358...R645-301-762.

PacifiCorp will use only existing roads for this project. No new roads will be constructed.

- 233. Topsoil Removal and Storage.** If required for drill setup, topsoil will be separately removed, stored, and redistributed on areas disturbed by coal exploration activities as necessary to assure successful revegetation or as required by the Division.

The method of drilling used by PacifiCorp for these holes assures that topsoil is not disturbed except where small excavations are made necessary for leveling the rig and associated components. Brattice cloth ground cover is used under the rig to protect the topsoil and surface vegetation; therefore the topsoil is not disturbed.

- 234. Diversions of Overland Flows.** Diversions of overland flows and ephemeral, perennial, or intermittent streams will be made in accordance with R-645-301-742.3.

PacifiCorp will obtain the necessary permissions and water rights actions to take water for drilling from local drainages in the vicinity of the proposed drill holes. Water for the Rilda Canyon drill holes 2014ABC and 2014DEF will be pumped/gravity fed directly from the nearby springs and/or un-named drainages located near the drill holes. No disturbance is made to the stream course.

The amount of water required for the project is estimated at 40,000 gallons per hole (two extra holes are used for this calculation, in case of need for a re-drill). Therefore, the maximum total quantity of water to be used is estimated at approximately 240,000 gallons (0.74 acre feet). A *Temporary Exchange Application* has been filed and approved by the State of Utah, Division of Water Rights prior to commencement of operations, and is included as an appendix to this Notice.

- 235. Minimizing Disturbance to Hydrologic Balance.** Surface drilling will be conducted in a manner which minimizes disturbance to the prevailing hydrologic

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balance in accordance with R645-301-356.300 and R645-301-763. The Division may specify additional measures which will be adopted by any person engaged in coal exploration.

During surface drilling, surface disturbance will consist only that which is necessary to level the rig and associated structures. No drill pad will be constructed, so there will be no additional runoff during precipitation events. No impoundments to contain runoff will be necessary. Overall impact on the hydrologic balance will be minimal, if any.

- 236. Acid- or Toxic Forming Materials.** Acid- or toxic-forming materials will be handled and disposed of in accordance with R645-301-731.110, 731.300, and 553.260.

Past drilling experience on East Mountain has shown that no acid- or toxic-materials have ever been produced, or are likely to be produced in future drilling. MSDS sheets for drill fluid concentrates to be used are attached to this application.

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**240. Reclamation Standards.**

- 241. Excavations.** If excavations, artificially flat areas, or embankments are created during exploration, these areas will be returned to the approximate original contour promptly after such features are needed for surface drilling.

The only excavations that will be made will be small shovel cuts made for leveling the rig and associated equipment. These will be promptly filled in to original contour as soon as the drilling equipment is removed from each site.

- 242. Re-Vegetation.** All areas disturbed by surface drilling activities will be revegetated in a manner that encourages prompt revegetation and recovery of a diverse, effective, and permanent vegetative cover. Revegetation will be accomplished in accordance with the following :

- 242.1 Re-Seeding.** All areas disturbed by coal exploration activities will be seeded or planted to the same seasonal variety native to the areas disturbed. If the land use of the exploration area is intensive agriculture, planting of the crops normally grown will meet the requirements of R645-202-242.100.

All drilling areas will be promptly re-seeded upon completion of each hole, removal of equipment, and recontouring of the site, if necessary, with a seed mix approved by the surface management agency and the Division.

The following is the seed mix specified from previous years approved drilling permits, and will be used unless changes are indicated by the agencies.

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<u>Species</u>	<u>lbs/acre (PLS)</u>
<b>Basic Mix</b>	
Columbia needle grass - <i>Stipa columbiana</i>	4.5
Slender wheatgrass - <i>Elymus trachycaulus</i>	4.5
Sandbergs bluegrass - <i>Poa secunda</i>	0.75
Pacific aster - <i>Aster chilensis</i>	0.2
<b>Supplement*</b>	
Sulfur flower - <i>Eriogonun umbellatum</i>	2.0
Rocky Mountain penstemon - <i>Penstemon strictus</i>	0.75

\* Seed should be purchased in individual seed packets, not as mixture.

The seed mixture will be hand broadcast and the area will be hand raked following seeding to cover the seed. Following seeding, any dead-fall that was removed from the drill site will be replaced.

**242.2 Soil Surface Stability.** The vegetative cover will be capable of stabilizing the soil surface from erosion.

Since the soil and vegetative cover will not be removed, and the vegetation will spring back up as soon as the drilling equipment is removed, this requirement will be met.

No crops are raised in the project area. Crop replacement will not be necessary.

**243. Reclamation of Boreholes.** Each exploration hole, borehole, well, or other exposed opening created during exploration will be reclaimed in accordance with R645-301-529, R645-301-551, R645-301-631, R645-301-738, and R645-301-765.

No mine openings or exploration openings will be created, therefore R645-301-529 and R645-301-551 do not apply in this case. 4 of these

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holes will be turned into water monitoring wells, two at each site, to monitor water levels in the Deer Creek Mine workings. The wells will be completed under the supervision of an individual with a water well driller's license. When a determination is made that the wells are no longer needed, they will be permanently sealed and reclaimed to meet the provisions of R645-301-738 and R645-301-765.

The proposed holes will be retained as water monitoring wells, to monitor water levels within the Deer Creek Mine if water should accumulate in the mine workings after mine abandonment. At the time the holes are drilled, the mine workings will not contain any water at the hole locations. However, if groundwater is present during drilling, it will be reported to the appropriate agencies (USFS, DOGM) and a determination will be made regarding the transfer and possible modification of the drill hole to a ground water monitoring well.

When the monitoring holes are no longer needed, the "B" sized casing will be cut off below ground level as far as is feasible and then will be completely sealed with cement and bentonite from the bottom of the hole to ground level. The cement slurry mixture used to plug and seal the hole will be mixed in compliance with standard cement mixing tables (e.g. Halliburton). Enough cement will be mixed and pumped into the hole to completely fill the casing. A cement surface plug will fill the top 5' of hole. A brass monument marker will be placed in the top of the cement surface plug with the hole number and year. The Bureau of Land Management Price Field Office will be contacted prior to completion to verify the abandonment procedures. Any variance from this procedure will be approved in advance by BLM and DOGM.

**244. Removal of Equipment.** All facilities and equipment will be promptly removed from the exploration area when they are no longer needed for exploration, except for those facilities and equipment that the Division determines may remain to:

244.1 Provide additional environmental data;

244.2 Reduce or control the on-site and off-site effects of the exploration activities;

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244.3 Facilitate future coal mining and reclamation operations by the person conducting the exploration.

When the drill rig setup is no longer needed for the project, the complete assemblage of equipment will be removed immediately from the area to facilitate reclamation work and free this equipment for use elsewhere by the contractor.

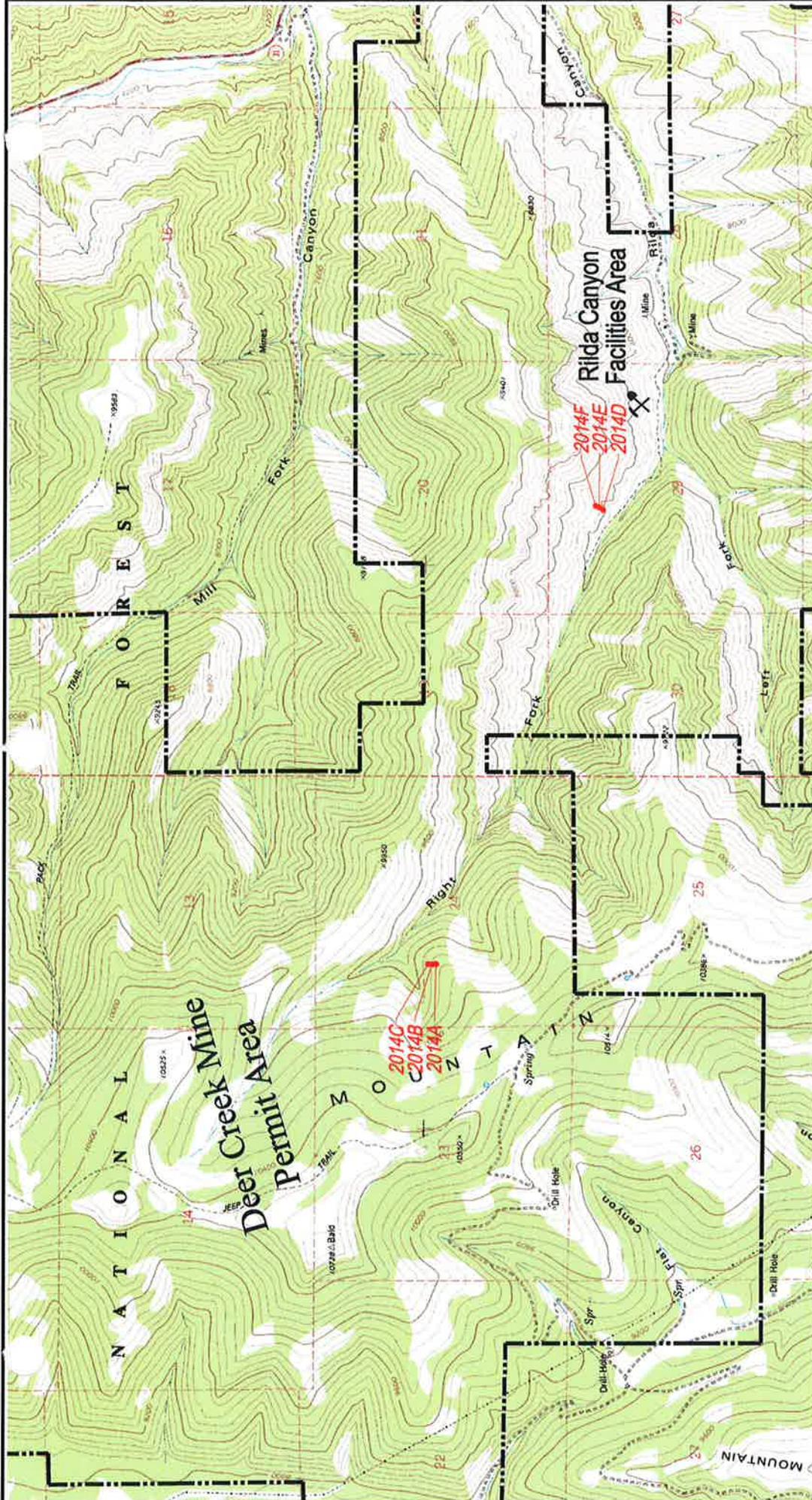
PacifiCorp does not anticipate needing this equipment for any further use in the exploration area.

**R645-203. Coal Exploration: Public Availability of Information.  
R645-203-100. Public Records.**

Except as provided in R645-203-200, all information submitted to the Division under R645-200 will be made available for public inspection and copying at the Division.

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**MAPS**



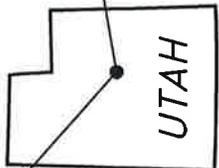
CAD FILE NAME/DISK#: MF-2013-DRILLING-BASE-MAP.DWG



**ENERGY WEST  
MINING COMPANY**  
A SUBSIDIARY OF PACIFICORP

2014 SURFACE DRILLING LEASES UTU-88554/UTU-06039 GENERAL LOCATION MAP	
DRAWN BY:	K. LARSEN
SCALE:	1" = 3000'
DATE:	APRIL 23, 2014
DRAWING #:	.....
SHEET	1 OF 1
REV.	

Modified from  
Rilda Quadrangle  
7.5 Minute Series

**LEGEND**

● 2014A PROPOSED 2014 DRILL HOLE

THE PRIMARY WATER SOURCE FOR DRILLING WILL BE THE ADJACENT STREAMS AND NEARBY PONDS WITH GRAVITY FLOW OR PUMPING TO RIG USING ONE INCH MINE HOSE

THE SECONDARY WATER SOURCE FOR DRILLING WILL BE THE STREAMS BELOW THE RIG PUMPING UP HILL USING ONE INCH MINE HOSE OR TRUCKING WATER IN FROM NEARBY WATER SOURCES

UTU-88554

2014C

2014B

2014A

PUMP

ONE INCH MINE HOSE

UTU-06039

UTU-88554



• 2014A PROPOSED 2014 DRILL HOLE

CAD FILE NAME/DISK#: 2013 DRILLING BASE MAP.DWG



2014 COAL EXPLORATION  
LEASES UTU-88554/UTU-84285  
EAST MOUNTAIN AERIAL PHOTO

DRAWN BY: K. LARSEN

SCALE: NONE DRAWING #:

DATE: APRIL 24, 2014

SHEET 1 OF 1 REV.



THE PRIMARY WATER SOURCE FOR DRILLING WILL BE THE ADJACENT STREAMS AND NEARBY PONDS WITH GRAVITY FLOW OR PUMPING TO RIG USING ONE INCH MINE HOSE

THE SECONDARY WATER SOURCE FOR DRILLING WILL BE THE STREAMS BELOW THE RIG PUMPING UP HILL USING ONE INCH MINE HOSE OR TRUCKING WATER IN FROM NEARBY WATER SOURCES

ONE INCH MINE HOSE  
 2014F  
 2014E  
 2014D  
 PUMP



-2014A PROPOSED 2014 DRILL HOLE

CAD FILE NAME/DISK#: 2013 DRILLING BASE MAP.DWG

**ENERGY WEST MINING COMPANY**  
 A SUBSIDIARY OF PACIFICORP

2014 COAL EXPLORATION  
 LEASES UTU-88554/UTU-84285  
 EAST MOUNTAIN AERIAL PHOTO

DRAWN BY:	K. LARSEN	...
SCALE:	NONE	DRAWING #:
DATE:	APRIL 24, 2014	SHEET 1 OF 1
		REV.





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**APPENDIX 1  
CONCURRENCE FROM FOREST SERVICE  
(PENDING)**

*May, 2014*

*PacifiCorp*

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**APPENDIX 3  
WATER RIGHTS APPROVAL  
(PENDING)**

*May, 2014*

*PacifiCorp*

**NOTICE OF INTENT TO CONDUCT  
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**APPENDIX 4  
MSDS SHEETS FOR PLATINUM PAC AND POLY  
PLUS**

*May, 2014*

*PacifiCorp*



## MATERIAL SAFETY DATA SHEET

MSDS NO. 12391

Trade Name: PLATINUM PAC\*

Revision Date: 11/30/2004

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Name: PLATINUM PAC\*  
Chemical Family: Polysaccharide  
Product Use: Oil well drilling fluid additive.  
Emergency Telephone (24 hr.): 281-561-1600

Supplied by: M-I HDD MINING & WATERWELL  
A Business Unit of M-I L.L.C.  
P.O. Box 42842  
Houston, TX 77242  
www.drilling-fluids.com

JOHN M.HOWA & SONS, INC.  
651 N.CARBONVILLE ROAD  
PRICE, UTAH 84501  
(435) 637-2012

Telephone Number: 281-561-1512  
Contact Person: Joanne Galvan, Product Safety Specialist

Revision Number: 0

#### HMIS Rating

Health: 1                      Flammability: 1                      Physical Hazard: 0                      PPE: E

HMIS Key: 4=Severe, 3=Serious, 2=Moderate, 1=Slight, 0=Minimal Hazard. \*Chronic effects - See Section 11. See Section 8 for Personal Protective Equipment recommendations.

### 2. HAZARDS IDENTIFICATION

Emergency Overview: Caution! May cause mechanical irritation of eyes, skin and respiratory tract. Long term inhalation of particulates may cause lung damage.

#### Canadian Classification:

UN PIN No: Not regulated

WHMIS Class: Not a controlled product.

Physical State: Powder, dust.

Odor: Odorless

Color: White to Light Yellow

#### Potential Health Effects:

##### Acute Effects

Eye Contact: May cause mechanical irritation  
Skin Contact: May cause mechanical irritation.  
Inhalation: May cause mechanical irritation.  
Ingestion: May cause gastric distress, nausea and vomiting if ingested.

#### Carcinogenicity & Chronic Effects:

See Section 11 - Toxicological Information.

#### Routes of Exposure:

Eyes. Dermal (skin) contact. Inhalation.

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Target Organs/Medical  
Conditions Aggravated by  
Overexposure:

Eyes. Skin. Respiratory System.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Wt. %	Comments:
Carboxymethylcellulose sodium salt	9004-32-4	100	No comments.

## 4. FIRST AID MEASURES

**Eye Contact:** Promptly wash eyes with lots of water while lifting eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

**Skin Contact:** Wash skin thoroughly with soap and water. Remove contaminated clothing and launder before reuse. Get medical attention if any discomfort continues.

**Inhalation:** Move person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Dilute with 2 - 3 glasses of water or milk, if conscious. Never give anything by mouth to an unconscious person. If signs of irritation or toxicity occur seek medical attention.

**General Notes:** Persons seeking medical attention should carry a copy of this MSDS with them.

## 5. FIRE FIGHTING MEASURES

### Flammable Properties

**Flash Point: F (C):** NA  
**Flammable Limits in Air - Lower (%):** ND  
**Flammable Limits in Air - Upper (%):** ND  
**Autoignition Temperature: F (C):** ND  
**Flammability Class:** NA  
**Other Flammable Properties:** Particulate may accumulate static electricity. Dusts at sufficient concentrations can form explosive mixtures with air.

**Extinguishing Media:** Use extinguishing media appropriate for surrounding fire.

### Protection Of Fire-Fighters:

**Special Fire-Fighting Procedures:** Do not enter fire area without proper personal protective equipment, including NIOSH/MSHA approved self-contained breathing apparatus. Evacuate area and fight fire from a safe distance. Water spray may be used to keep fire-exposed containers cool. Keep water run off out of sewers and waterways.

**Hazardous Combustion Products:** Oxides of: Carbon.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Use personal protective equipment identified in Section 8.

**Spill Procedures:** Evacuate surrounding area, if necessary. Wet product may create a slipping hazard. Contain spilled material. Avoid the generation of dust. Sweep, vacuum, or shovel and place into closable container for disposal.

**Environmental Precautions:** Do not allow to enter sewer or surface and subsurface waters. Waste must be disposed of in accordance with federal, state and local laws.

# MATERIAL SAFETY DATA SHEET

Trade Name: PLATINUM PAC\*

MSDS NO. 12391

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## 7. HANDLING AND STORAGE

**Handling:** Put on appropriate personal protective equipment. Avoid contact with skin and eyes. Avoid generating or breathing dust. Product is slippery if wet. Use only with adequate ventilation. Wash thoroughly after handling.

**Storage:** Store in dry, well-ventilated area. Keep container closed. Store away from incompatibles. Follow safe warehousing practices regarding palletizing, banding, shrink-wrapping and/or stacking.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits (TLV & PEL - 8H TWA):

Ingredient	CAS No.	Wt. %	ACGIH TLV	OSHA PEL	Other	Notes
Carboxymethylcellulose sodium salt	9004-32-4	100	NA	NA	NA	(1)

### Notes

(1) Control as an ACGIH particulate not otherwise specified (PNOS): 10 mg/m<sup>3</sup> (Inhalable); 3 mg/m<sup>3</sup> (Respirable) and an OSHA particulate not otherwise regulated (PNOR): 15 mg/m<sup>3</sup> (Total); 5 mg/m<sup>3</sup> (Respirable).

**Engineering Controls:** Use appropriate engineering controls such as, exhaust ventilation and process enclosure, to ensure air contamination and keep workers exposure below the applicable limits.

### Personal Protection Equipment

**Eye/Face Protection:** Dust resistant safety goggles.

**Skin Protection:** Not normally necessary. If needed to minimize irritation: Wear appropriate clothing to prevent repeated or prolonged skin contact. Wear chemical resistant gloves such as: Nitrile. Neoprene.

**Respiratory Protection:** If exposed to particulates/aerosols:  
Use at least a NIOSH-approved N95 half-mask disposable particulate respirator. In work environments containing oil mist/aerosol use at least a NIOSH-approved P95 half-mask disposable or reuseable particulate respirator.  
If exposed to organic vapors:  
Use a NIOSH/MSHA-approved organic vapor respirator. CCROV: CCR with organic vapor cartridge.  
A NIOSH/MSHA approved respirator with ammonia/methylamine cartridges should be used to protect against ammonia or amine inhalation exposure.

Refer to Exposure Limits table (Section 8) for component specific respiratory protection recommendations.

**General Hygiene Considerations:** Work clothes should be washed separately at the end of each work day. Disposable clothing should be discarded, if contaminated with product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Color:** White to Light Yellow  
**Odor:** Odorless  
**Physical State:** Powder, dust.  
**pH:** 6.0 - 8.5 (1% solution)  
**Specific Gravity (H<sub>2</sub>O = 1):** 0.3 - 0.5  
**Solubility (Water):** Soluble.  
**Flash Point: F (C):** NA  
**Melting/Freezing Point:** ND  
**Boiling Point:** ND

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# MATERIAL SAFETY DATA SHEET

Trade Name: PLATINUM PAC\*

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Vapor Pressure: NA  
Vapor Density (Air=1): NA  
Evaporation Rate: NA  
Odor Threshold(s): ND

## 10. STABILITY AND REACTIVITY

**Chemical Stability:** Stable  
**Conditions to Avoid:** Keep away from heat, sparks and flame.  
**Materials to Avoid:** Oxidizers.  
**Hazardous Decomposition Products:** For thermal decomposition products, see Section 5.  
**Hazardous Polymerization:** Will not occur

## 11. TOXICOLOGICAL INFORMATION

**Component Toxicological Data:** Any adverse component toxicological effects are listed below. If no effects are listed, no such data were found.

Ingredient	CAS No.	Acute Data
Carboxymethylcellulose sodium salt	9004-32-4	Oral LD50: 27000 mg/kg (rat); Dermal LD50: >2000 mg/kg (rabbit); LC50: >5800 mg/m <sup>3</sup> /4H (rat)

Ingredient	Component Toxicological Summary
Carboxymethylcellulose sodium salt	Rats fed diets containing 2.5, 5 and 10% of this component for 3 months demonstrated some kidney effects. Effects were believed to be related to high sodium content of diet. (Food Chem. Toxicol.)

### Product Toxicological Information:

Long term inhalation of particulate can cause irritation, inflammation and/or permanent injury to the lungs. Illnesses such as pneumoconiosis ("dusty lung"), pulmonary fibrosis, chronic bronchitis, emphysema and bronchial asthma may develop.

## 12. ECOLOGICAL INFORMATION

**Product Ecotoxicity Data:** Contact M-I Environmental Affairs Department for available product ecotoxicity data.  
**Biodegradation:** ND  
**Bioaccumulation:** ND  
**Octanol/Water Partition Coefficient:** ND

## 13. DISPOSAL CONSIDERATIONS

**Waste Classification:** This product does not meet the criteria of a hazardous waste if discarded in its purchased form.

**Waste Management:** Under U.S. Environmental Protection Agency (EPA) Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine at the time of disposal, whether the product meets RCRA criteria for the hazardous waste. This is because product uses, transformations, mixtures, processes, etc., may render the resulting materials hazardous. Empty containers retain residues. All labeled precautions must be observed.

**Disposal Method:** Recover and reclaim or recycle, if practical. Should this product become a waste, dispose of in a permitted industrial landfill. Ensure that the containers are empty by the RCRA criteria prior to disposal in a permitted industrial landfill.

# MATERIAL SAFETY DATA SHEET

Trade Name: **PLATINUM PAC\***

Revision Date: 11/30/2004

MSDS NO. 12391

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## 14. TRANSPORT INFORMATION

U.S. DOT Shipping Description:	Not regulated for transportation by DOT, TDG, IMDG, ICAO/IATA.
Canada TDG Shipping Description: UN PIN No:	Not regulated. Not regulated
IMDG Shipping Description:	Not regulated.
ICAO/IATA Shipping Description:	Not regulated.

## 15. REGULATORY INFORMATION

### U.S. Federal and State Regulations

SARA 311/312 Hazard Categories: Not a SARA 311/312 hazard.

SARA 302/304, 313; CERCLA RQ, Note: If no components are listed below, this product is not subject to the referenced California Proposition 65: SARA and CERCLA regulations and is not known to contain a Proposition 65 listed chemical at a level that is expected to pose a significant risk under anticipated use conditions.

### International Chemical Inventories

Australia AICS - Components are listed or exempt from listing.  
Canada DSL - Components are listed or exempt from listing.  
China Inventory - Components are listed or exempt from listing.  
European Union EINECS - Components are listed or exempt from listing.  
Japan METI ENCS - Components are listed or exempt from listing.  
Korea TCCL ECL - Components are listed or exempt from listing.  
Philippine PICCS - Components are listed or exempt from listing.  
U.S. TSCA - Components are listed or exempt from listing.  
U.S. TSCA - No components are subject to TSCA 12(b) export notification requirements.

### Canadian Classification:

Controlled Products Regulations Statement: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Class: Not a controlled product.

## 16. OTHER INFORMATION

The following sections have been revised: New issue

NA - Not Applicable, ND - Not Determined.

\*A mark of M-I L.L.C.

### **Disclaimer:**

MSDS furnished independent of product sale. While every effort has been made to accurately describe this product, some of the data are obtained from sources beyond our direct supervision. We can not make any assertions as to its reliability or completeness; therefore, user may rely on it only at user's risk. We have made no effort to censor or conceal deleterious aspects of this product. Since we cannot anticipate or control the conditions under which this information and product may be used, we make no guarantee that the precautions we have suggested will be adequate for all individuals and/or situations. It is the obligation of each user of this product to comply with the requirements of all applicable laws regarding use and disposal of this product. Additional information will be furnished upon request to assist the user; however, no warranty, either expressed or implied, nor liability of any nature with respect to this product or to the data herein is made or incurred hereunder.

JOHN M.HOWA & SONS, INC.  
651 N.CARBONVILLE ROAD  
PRICE, UTAH 84501  
(435) 637-2012



# SAFETY DATA SHEET

## POLY-PLUS (LIQUID)

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

**PRODUCT NAME:** POLY-PLUS (LIQUID)  
**APPLICATIONS:** Flocculant  
**SUPPLIER:** M-I Drilling Fluids UK Ltd,  
 Pocrá Quay,  
 Footdee,  
 Aberdeen. AB11 5DQ  
 Tel: 44 (0)1224 - 584336  
 Fax: 44 (0)1224 - 576119  
**EMERGENCY TELEPHONES:** 001 281 561 1600 (USA)

JOHN M.HOWA & SONS, INC.  
 651 N.CARBONVILLE ROAD  
 PRICE, UTAH 84501  
 (435) 637-2012

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

NAME	EINECS Nr.:	CLASSIFICATION	CONTENT
CAS No.: DISTILLATES (PETROLEUM), HYDROTREATED LIGHT; KEROSENE - UNSPECIFIED 64742-47-8	265-149-8	Xn R-65, 66	20-30 %

The Full Text for all R-Phrases are Displayed in Section 16

**COMPOSITION COMMENTS:** This product is classified as an irritant according to the EU Directives.

### 3. HAZARDS IDENTIFICATION

Irritating to skin.

### 4. FIRST AID MEASURES

**INHALATION:** Move the exposed person to fresh air at once. Keep the affected person warm and at rest. Get prompt medical attention.

**INGESTION:** DO NOT induce vomiting. Get medical attention immediately. Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious.

**SKIN:** Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if irritation persists after washing.

**EYES:** Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention promptly if symptoms occur after washing. Continue to rinse for at least 15 minutes.

## 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Water spray. Powder, foam or CO2.

**SPECIAL FIRE FIGHTING PROCEDURES:** Use water to keep fire exposed containers cool and disperse vapours. Use supplied air respirator if substance is involved in a fire.

**HAZARDOUS COMBUSTION PRODUCTS:** Fire or high temperatures create: Oxides of: Carbon, Nitrogen.

## 6. ACCIDENTAL RELEASE MEASURES

**SPILL CLEANUP METHODS:** Absorb in vermiculite, dry sand or earth and place into containers. Flush clean with lots of water. Be aware of potential for surfaces to become slippery. Do not let washing down water contaminate ponds or waterways.

## 7. HANDLING AND STORAGE

**USAGE PRECAUTIONS:** Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

**STORAGE PRECAUTIONS:** Keep in cool, dry, ventilated storage and closed containers. Keep in original container.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

<b>INGREDIENT NAME:</b>	<b>CAS No.:</b>	<b>STD</b>	<b>LT EXP 8 Hrs</b>	<b>ST EXP 15 Min</b>
DISTILLATES (PETROLEUM), HYDROTREATED LIGHT; KEROSENE - UNSPECIFIED	64742-47-8	OES	5 mg/m3	10 mg/m3

**PROTECTIVE EQUIPMENT:**



**VENTILATION:** No specific ventilation requirements noted, but forced ventilation may still be required if air contamination exceeds acceptable level.

**RESPIRATORS:** Wear mask supplied with: Gas cartridge (organic substances).

**PROTECTIVE GLOVES:** Use protective gloves made of: Impermeable material. Rubber, neoprene or PVC.

**EYE PROTECTION:** Wear approved, tight fitting safety glasses where splashing is probable.

**OTHER PROTECTION:** Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE:** Liquid. Viscous

<b>COLOUR:</b>	White. Milky.		
<b>ODOUR/TASTE:</b>	Hydrocarbon. Ammonia.		
<b>DENSITY/SPECIFIC GRAVITY (g/ml):</b>	1 - 1.1	<b>Temperature (°C):</b>	
<b>VAPOUR PRESSURE:</b>	0.002 mmHg	<b>Temperature (°C):</b>	20
<b>pH-VALUE, CONC. SOLUTION:</b>	6 - 8		
<b>SOLUBILITY DESCRIPTION:</b>	Disperses.		
<b>SOLUBILITY VALUE (g/100g H<sub>2</sub>O 20°C):</b>	5		
<b>FLASH POINT (°C):</b>	> 100	<b>Method:</b>	
<b>AUTO IGNITION TEMP. (°C):</b>	> 200		

## 10. STABILITY AND REACTIVITY

<b>STABILITY:</b>	Normally stable.
<b>CONDITIONS TO AVOID:</b>	Avoid extremes of temperature.
<b>HAZARDOUS POLYMERIZATION:</b>	Will not polymerize.
<b>MATERIALS TO AVOID:</b>	Strong oxidizing agents.
<b>HAZARDOUS DECOMP. PRODUCTS:</b>	Fire or high temperatures create: Oxides of: Carbon. Nitrogen.

## 11. TOXICOLOGICAL INFORMATION

<b>TOXIC DOSE - LD 50:</b>	> 5000 mg/kg (oral rat)
<b>INHALATION:</b>	Gas or vapour may irritate respiratory system.
<b>INGESTION:</b>	May cause discomfort if swallowed.
<b>SKIN:</b>	Irritating to skin. Acts as a defatting agent on skin. May cause cracking of skin, and eczema.
<b>EYES:</b>	Spray and vapour in the eyes may cause irritation and smarting.

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicological data</b>	Acute toxicity. LC50 fish > 100 mg/l Calculated
	Biodegradability. OECD-test. > 60% Mineral Oil
	Biodegradability. OECD-test. < 5% Polymer

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHODS:**

Recover and reclaim or recycle, if practical. Dispose of in accordance with Local Authority requirements. This material and its container must be disposed of as hazardous waste.

**14. TRANSPORT INFORMATION**

**ROAD TRANSPORT NOTES:** Not Classified  
**RAIL TRANSPORT NOTES:** Not Classified.  
**SEA TRANSPORT NOTES:** Not Classified.  
**AIR TRANSPORT NOTES:** Not Classified.

**15. REGULATORY INFORMATION****LABEL FOR SUPPLY:**

**RISK PHRASES:** R-38 Irritating to skin.  
**SAFETY PHRASES:** S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
 S-28 After contact with skin, wash immediately with water and soap.  
 S-23 Do not breathe gas/fumes/vapour/spray.  
**EU DIRECTIVES:** System of specific information relating to Dangerous Preparations. 91\155.

**16. OTHER INFORMATION**

**USER NOTES:** HMIS Health - 1 HMIS Flammability - 1 HMIS Physical Hazard - 1 J - Splash Goggles, Gloves, Synthetic Apron, Dust and Vapor Respirator.  
**INFORMATION SOURCES:** Sax's Dangerous Properties of Industrial Materials, 9th ed., Lewis, R.J. Sr., (ed.), VNR, New York, New York, (1997). Material Safety Data Sheet, Misc. manufacturers.  
**ISSUED BY:** Sarah Glover  
**REVISION DATE:** 05-11-03  
**REV. No./REPL. SDS GENERATED:** 4  
**PRINTING DATE:** 2003-11-05  
**R-PHRASES (Full Text):** R-65 Harmful: may cause lung damage if swallowed. R-66 Repeated exposure may cause skin dryness or cracking.  
**DISCLAIMER:** MSDS furnished independent of product sale. While every effort has been made to accurately describe this product, some of the data are obtained from sources beyond our direct supervision. We cannot make any assertions as to its reliability or completeness; therefore, user may rely on it only at user's risk. We have made no effort to censor or conceal deleterious aspects of this product. Since we cannot anticipate or control the conditions under which this information and product may be used, we make no guarantee that the precautions we have suggested will be

adequate for all individuals and/or situations. It is the obligation of each user of this product to comply with the requirements of all applicable laws regarding use and disposal of this product. Additional information will be furnished upon request to assist the user; however, no warranty, either expressed or implied, nor liability of any nature with respect to this product or to the data herein is made or incurred hereunder.

**NOTICE OF INTENT TO CONDUCT  
MINOR COAL EXPLORATION  
FEDERAL COAL LEASE UTU-88554 AND UTU-06039**

**APPENDIX 5  
CURRENT THREATENED AND ENDANGERED  
SPECIES LIST  
DIVISION OF WILDLIFE RESOURCES**

*May, 2014*

*PacifiCorp*

## County Lists of Utah's Federally Listed Threatened(T), Endangered(E), and Candidate(C) Species

Disclaimer: This list was compiled using known species occurrences and species observations from the Utah Natural Heritage Program's Biodiversity Tracking and Conservation System (BIOTICS); other federally listed species likely occur in Utah Counties. This list includes both current and historic records. (Last updated on January 12, 2012).

### Beaver County

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Utah Prairie-dog	<i>Cynomys parvidens</i>	T
Least Chub	<i>lotichthys phlegethontis</i>	C
Ostler Peppergrass	<i>Lepidium ostleri</i>	C
Frisco Clover	<i>Trifolium friscanum</i>	C
Frisco Buckwheat	<i>Eriogonum soredium</i>	C

### Box Elder County

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Goose Creek Milkvetch	<i>Astragalus anserinus</i>	C
Least Chub	<i>lotichthys phlegethontis</i>	C
Lahontan Cutthroat Trout	<i>Oncorhynchus clarkii henshawii</i>	T
June Sucker	<i>Chasmistes liorus</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Gray Wolf	<i>Canis lupus</i>	E

### Cache County

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Maguire Primrose	<i>Primula maguirei</i>	T
Ute Ladies' Tresses	<i>Spiranthes diluvialis</i>	LT
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated
Canada Lynx	<i>Lynx canadensis</i>	T

### Carbon County

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Uinta Basin Hookless Cactus	<i>Sclerocactus wetlandicus</i>	T
Graham Beardtongue	<i>Penstemon grahamii</i>	T Proposed
Humpback Chub	<i>Gila cypha</i>	E
Bonytail	<i>Gila elegans</i>	E
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E
Razorback Sucker	<i>Xyrauchen texanus</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Black-footed Ferret	<i>Mustela nigripes</i>	E Extirpated
Gray Wolf	<i>Canis lupus</i>	E

### Daggett County

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T
Humpback Chub	<i>Gila cypha</i>	E
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E

**Daggett County - continued**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Razorback Sucker	<i>Xyrauchen texanus</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Black-footed Ferret	<i>Mustela nigripes</i>	E Extirpated
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated
Canada Lynx	<i>Lynx canadensis</i>	T

**Davis County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Least Chub	<i>lotichthys phlegethontis</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C

**Duchesne County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T
Shrubby Reed-mustard	<i>Glaucocarpum suffrutescens</i>	E
Barneby Ridge-cress	<i>Lepidium barnebyanum</i>	E
Pariette Cactus	<i>Sclerocactus brevispinus</i>	T
Uinta Basin Hookless Cactus	<i>Sclerocactus wetlandicus</i>	T
Graham Beardtongue	<i>Penstemon grahamii</i>	T Proposed
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Black-footed Ferret	<i>Mustela nigripes</i>	E Experimental
Gray Wolf	<i>Canis lupus</i>	E
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated

**Emery County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Jones Cycladenia	<i>Cycladenia humilis var jonesii</i>	T
Last Chance Townsendia	<i>Townsendia aprica</i>	T
Barneby Reed-mustard	<i>Schoenocrambe barnebyi</i>	E
San Rafael Cactus	<i>Pediocactus despainii</i>	E
Winkler Pincushion Cactus	<i>Pediocactus winkleri</i>	T
Wright Fishhook Cactus	<i>Sclerocactus wrightiae</i>	E
Humpback Chub	<i>Gila cypha</i>	E
Bonytail	<i>Gila elegans</i>	E
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E
Razorback Sucker	<i>Xyrauchen texanus</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T
Black-footed Ferret	<i>Mustela nigripes</i>	E Extirpated
Canada Lynx	<i>Lynx canadensis</i>	T
Gray Wolf	<i>Canis lupus</i>	E

**Garfield County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T
Jones Cycladenia	<i>Cycladenia humilis var jonesii</i>	T
Autumn Buttercup	<i>Ranunculus aestivalis</i>	E
Humpback Chub	<i>Gila cypha</i>	E

**Garfield County - continued**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Bonytail	<i>Gila elegans</i>	E
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T
Utah Prairie-dog	<i>Cynomys parvidens</i>	T
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated

**Grand County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Jones Cycladenia	<i>Cycladenia humilis var jonesii</i>	T
Humpback Chub	<i>Gila cypha</i>	E
Bonytail	<i>Gila elegans</i>	E
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E
Razorback Sucker	<i>Xyrauchen texanus</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Gunnison Sage-grouse	<i>Centrocercus minimus</i>	C
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Black-footed Ferret	<i>Mustela nigripes</i>	E Extirpated

**Iron County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Least Chub	<i>lotichthys phlegethontis</i>	C
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T
Utah Prairie-dog	<i>Cynomys parvidens</i>	T
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated

**Juab County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Least Chub	<i>lotichthys phlegethontis</i>	C
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C

**Kane County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Welsh's Milkweed	<i>Asclepias welshii</i>	T
Kodachrome Bladderpod	<i>Lesquerella tumulosa</i>	E
Siler Pincushion Cactus	<i>Pediocactus sileri</i>	T
Jones Cycladenia	<i>Cycladenia humilis var jonesii</i>	T
Kanab Ambersnail	<i>Oxyloma kanabense</i>	E
Coral Pink Sand Dunes Tiger Beetle	<i>Cicindela limbata albissima</i>	C
Humpback Chub	<i>Gila cypha</i>	E
Bonytail	<i>Gila elegans</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	E
Utah Prairie-dog	<i>Cynomys parvidens</i>	T

**Millard County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Least Chub	<i>Iotichthys phlegethontis</i>	C
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Utah Prairie-dog	<i>Cynomys parvidens</i>	T
Frisco Clover	<i>Trifolium friscanum</i>	C

**Morgan County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Gray Wolf	<i>Canis lupus</i>	E

**Piute County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Utah Prairie-dog	<i>Cynomys parvidens</i>	T
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated

**Rich County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Black-footed Ferret	<i>Mustela nigripes</i>	E Extirpated

**Salt Lake County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T
Least Chub	<i>Iotichthys phlegethontis</i>	C
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
June Sucker	<i>Chasmistes liorus</i>	E
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C

**San Juan County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Navajo Sedge	<i>Carex specuicola</i>	T
Humpback Chub	<i>Gila cypha</i>	E
Bonytail	<i>Gila elegans</i>	E
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E
Razorback Sucker	<i>Xyrauchen texanus</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Gunnison Sage-grouse	<i>Centrocercus minimus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	E
Black-footed Ferret	<i>Mustela nigripes</i>	E Extirpated
Gray Wolf	<i>Canis lupus</i>	E

**Sanpete County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Heliotrope Milkvetch	<i>Astragalus montii</i>	T
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C

**Sanpete County - continued**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Utah Prairie-dog	<i>Cynomys parvidens</i>	T
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated
Canada Lynx	<i>Lynx canadensis</i>	T

**Sevier County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Last Chance Townsendia	<i>Townsendia aprica</i>	T
Wright Fishhook Cactus	<i>Sclerocactus wrightiae</i>	E
Heliotrope Milkvetch	<i>Astragalus montii</i>	T
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Utah Prairie-dog	<i>Cynomys parvidens</i>	T
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated
Canada Lynx	<i>Lynx canadensis</i>	T

**Summit County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated
Canada Lynx	<i>Lynx canadensis</i>	T
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C

**Tooele County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T
Least Chub	<i>Notichthys phlegethontis</i>	C
Bonytail	<i>Gila elegans</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C

**Uintah County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T
Shrubby Reed-mustard	<i>Glaucocarpum suffrutescens</i>	E
Clay Reed-mustard	<i>Schoenocrambe argillacea</i>	T
Pariette Cactus	<i>Sclerocactus brevispinus</i>	T
Uinta Basin Hookless Cactus	<i>Sclerocactus wetlandicus</i>	T
White River Beardtongue	<i>Penstemon scariosus var albifluvis</i>	C
Graham Beardtongue	<i>Penstemon grahamii</i>	T Proposed
Humpback Chub	<i>Gila cypha</i>	E
Bonytail	<i>Gila elegans</i>	E
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E
Razorback Sucker	<i>Xyrauchen texanus</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Black-footed Ferret	<i>Mustela nigripes</i>	E Experimental
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated
Canada Lynx	<i>Lynx canadensis</i>	T

**Utah County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T
Deseret Milkvetch	<i>Astragalus desereticus</i>	T
Clay Phacelia	<i>Phacelia argillacea</i>	E
Least Chub	<i>Notichthys phlegethontis</i>	C
June Sucker	<i>Chasmistes liorus</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated

**Wasatch County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T
Clay Phacelia	<i>Phacelia argillacea</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated
Canada Lynx	<i>Lynx canadensis</i>	T

**Washington County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Siler Pincushion Cactus	<i>Pediocactus sileri</i>	T
Shivwits or Shem Milkvetch	<i>Astragalus ampullarioides</i>	E
Holmgren Milkvetch	<i>Astragalus holmgreniorum</i>	E
Gierisch Mallow	<i>Sphaeralcea gierischii</i>	C
Dwarf Bearclaw-poppy	<i>Arctomecon humilis</i>	E
Virgin Chub	<i>Gila seminuda</i>	E
Woundfin	<i>Plagopterus argentissimus</i>	E
Relict Leopard Frog	<i>Rana onca</i>	C Extirpated
Desert Tortoise	<i>Gopherus agassizii</i>	T
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	E
Utah Prairie-dog	<i>Cynomys parvidens</i>	T
Gray Wolf	<i>Canis lupus</i>	E
Brown (Grizzly) Bear	<i>Ursus arctos</i>	T Extirpated

**Wayne County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T
Barneby Reed-mustard	<i>Schoenocrambe barnebyi</i>	E
Winkler Pincushion Cactus	<i>Pediocactus winkleri</i>	T
Wright Fishhook Cactus	<i>Sclerocactus wrightiae</i>	E
Last Chance Townsendia	<i>Townsendia aprica</i>	T
San Rafael Cactus	<i>Pediocactus despainii</i>	E
Humpback Chub	<i>Gila cypha</i>	E
Razorback Sucker	<i>Xyrauchen texanus</i>	E
Bonytail	<i>Gila elegans</i>	E
Colorado Pikeminnow	<i>Ptychocheilus lucius</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C

**Wayne County - continued**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Utah Prairie-dog	<i>Cynomys parvidens</i>	T

**Weber County**

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	T
June Sucker	<i>Chasmistes liorus</i>	E
Greater Sage-grouse	<i>Centrocercus urophasianus</i>	C
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	C
Gray Wolf	<i>Canis lupus</i>	E

**DEFINITIONS**

**E**

A taxon that is listed by the U.S. Fish and Wildlife Service as "endangered" with the probability of worldwide extinction.

**E Experimental**

An "endangered" taxon that is considered by the U.S. Fish and Wildlife Service to be "experimental and non-essential" in its designated use areas in Utah.

**E, T, or C Extirpated**

An "endangered," "threatened," or "candidate" taxon that is "extirpated" and considered by the U.S. Fish and Wildlife Service to no longer occur in Utah.

**E or T Proposed**

A taxon "proposed" to be listed as "endangered" or "threatened" by the U.S. Fish and Wildlife Service.

**T**

A taxon that is listed by the U.S. Fish and Wildlife Service as "threatened" with becoming endangered.

**C**

A taxon for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threats to justify it being a "candidate" for listing as endangered or threatened.

**Note: Please contact the U.S. Fish and Wildlife Service (801-975-3330) for the purpose of consultation under the Endangered Species Act.**

**NOTICE OF INTENT TO CONDUCT  
MINOR COAL EXPLORATION  
FEDERAL COAL LEASE UTU-88554 AND UTU-06039**

**APPENDIX 6  
ARCHAEOLOGICAL SURVEYS  
CLASS I AND CLASS III  
AVAILABLE FROM BY EARTHTOUCH, LLC  
(PENDING)**

*May, 2014*

*PacifiCorp*

**NOTICE OF INTENT TO CONDUCT  
MINOR COAL EXPLORATION  
FEDERAL COAL LEASE UTU-88554 AND UTU-06039**

*May, 2014*

*PacifiCorp*