



安全理事会

Distr.
GENERALS/1998/1233
29 December 1998
CHINESE
ORIGINAL: ENGLISH

1998年12月29日

秘书长给安全理事会主席的信

谨根据安全理事会 1998 年 11 月 24 日第 1210(1998)号决议第 9 段,提出为第 1175(1998)号决议第 1 段所述目的所需的部件和设备详细清单。

为了协助编写上述清单,我派遣一个四名专家小组前往伊拉克。这些专家是 Saybolt Nederland B. V.提供的,这家公司根据与联合国的一项合同,从根据第 986(1995)号决议在伊拉克开始人道主义方案以来,一直提供独立石油监察员。小组于 1998 年 12 月 13 日至 16 日访问伊拉克,考察现场情况,并与伊拉克政府协商,编写了促使使伊拉克能够增加石油和石油产品出口,在数量上足以产生第 1153(1998)号决议所定的款额,所需的备件和设备清单。小组的报告一并附上,以供你参考。

如我 1998 年 4 月 15 日递交根据 1153(1998)号决议第 12 段所设立的专家小组的执行摘要给安全理事会主席的信(S/1998/330),以及我在随后的报告,包括 1998 年 11 月 19 日提出的最近一次关于第 986(1995)号决议的人道主义方案执行情况的报告(S/1998/1100)指出,伊拉克的石油工业继续处于可悲境况。记得专家小组当时指出,在过去二十年里,伊拉克现有油田的生产力受到严重削减,有的是无可挽回的。他们还指出,大幅度增加生产而不同时在备件和设备方面增加开支,将严重损害含油岩和管道系统,并且违反公认的“完善油田管理”的原则。

专家小组现下提出的报告叙述伊拉克生产和出口石油的能力进一步恶化。自前一专家小组于 1998 年 3 月访问以来,伊拉克整个石油生产力预计下降持续约为年率

4 至 8%。由于缺乏排水设施,北部和南部的大批油井都停止生产。专家小组估计这些油井约有 20%是无可挽回受损。他们认为,如果及时获得适当备件,其他油井可恢复生产,从而恢复到约每日 100 000 桶的生产力。根据专家小组的意见,在今后六个月期间,可能使生产力有净增长,但以紧要的备件及时送达为条件。他们认为,伊拉克政府提供的备件和设备清单是对持续并最后增加目前的产量的务实的做法,即使反映了继续依赖过时的油田开发概念。

安全理事会第 1153(1998)号决议核准伊拉克石油和石油产品出口大量增加,后来,安理会第 1175(1998)号决议核准一笔 3 亿美元用以购买人道主义方案第四阶段规定的石油备件和设备。可是,备件和设备申请书的核可进度一直很慢。除非伊拉克迅速获得必要的石油备件和设备,否则,就难于维持甚至目前的石油生产水平和出口。人道主义方案的执行也受到最近几个月石油价格大幅下跌的不利影响,使得执行第四阶段的分配计划所需的 31 亿美元之中短缺了 10 多亿美元。

到 1998 年 12 月 28 日为止,收到了伊拉克石油工业备件和设备申请书 447 件,总值 2.432 万美元,其中 392 件,总值 1.827 万美元,已分发。分发的申请书总数之中,有 238 件,总值 1.336 万美元,已由安全理事会第 661(1990)号决议所设委员会核准,而有 133 件,总值 4 360 万美元,被暂不批准。其余 48 件申请书,总值 6 050 万美元,由于申请者提供的资料不足或需要对分配计划进行修改,尚未分发。

如专家小组指出,提交安理会的备件和设备清单是“合理的”和包括了日益恶化的伊拉克石油工业最基本的需要。因此,安理会如果可请第 661(1990)号决议所设委员会在审议和核可根据第四阶段和第五阶段提出的石油备件和设备申请书时尽快予以处理,并且也进一步审查所有暂不核准的申请书,将是有益的。在这方面,应该指出的是,要求的大部分备件和设备都需要较长的交货期,因为它们并不是立即可供应的“现有货品”。伊拉克方案办事处随时准备协助委员会,提供委员会可能需要的任何其他资料,包括技术意见。

科菲·安南(签名)

附件一

根据安全理事会第 1210(1998)号决议

第 9 段设立的专家小组的报告

A. 职权范围

1. 安全理事会 1998 年 11 月 24 日第 1210(1998)号决议第 9 段请“秘书长与伊拉克政府协商,于 1998 年 12 月 31 日前向安理会提出一份清单,详列第 1175 (1998)号决议第 1 段所述目的所需要的零件和设备。”专家小组的职权范围包括:上游和下游作业的细目,及其相互关系;指明每一物件或项目对维持目前的生产以及增加生产的影响;评估根据第四阶段提供的零件和设备对维持和增加生产的影响;澄清长期的零件需要;以及零件名称的解释或定义(即编号、批量、配套、尺寸)。

B. 引言

2. 应秘书长要求,一个专家小组访问伊拉克,以确定维持伊拉克目前原油出口能力目前所需要的零件和设备,并进一步评估增加出口的潜力。

3. 专家小组于 1998 年 12 月 13 日至 16 日访问伊拉克,并与有关当局,特别是石油部,和在石油部门所有经营中的公司的代表会晤,审定石油零件和设备清单。

4. 自专家小组于 1998 年 3 月访问伊拉克以来,伊拉克整个石油生产力预计下降继续保持在年度总产量的 4 至 8%左右。

5. 由于缺乏排水设施,北部和南部的大量油井都停止生产。这些油井约有 20%是无可挽回受损。其他油井如有适当备件,则可恢复生产,从而恢复到约每日 100 000 桶的生产力。

6. 伊拉克政府所提的增加产量达到每 180 天 52.56 亿美元阶段的提议,按现有的局限,是革新和务实的。伊拉克政府对第五阶段给专家小组的备件和设备清单被视为是合理的。在若干大型油田钻井替换生产油井,连同清理和翻修老油井使其生产更多石油,以及改善下游系统,会成功取代上述过程中所损失的石油产量。

7. 在今后六个月期间,有可能使产量净增加,但这视紧要备件是否及时送达而定。不过,必须指出的是,伊拉克石油工业的整个方案与现代工业技术和公认的“金钱价值”投资的原则脱节。备件的第五阶段清单反映对合适物件提议的开支,但它是依赖过时的油田发展概念。在目前的局限下,伊拉克石油工业极不可能甚至会达成以石油换粮食方案有关的规划生产指标。

8. 专家小组建议的办法是执行一项方案,就是钻平行井(而不是目前的垂直井)来大量提高生产业绩,尽量减少水的流入和限制对储油层的损害。这一办法所需的备件和设备清单将第五阶段所提出的清单大不相同,但会是对现有资金的最佳回收。

9. 自 1998 年 3 月专家小组前次访问以来,伊拉克石油工业改组成 13 家独立的营业公司,伊拉克政府根据以石油换粮食方案第五阶段向每一公司分派的备件资金如下:

<u>公司名称</u>	<u>拨款</u> (美元)
北方石油公司	85 000 000
南方石油公司	100 000 000
伊拉克钻井公司	20 000 000
石油项目公司	10 000 000
石油勘探公司	5 000 000
北方炼油公司	32 000 000

中土炼油公司	10 000 000
南方炼油公司	5 000 000
北方煤气公司	4 000 000
南方煤气公司	4 000 000
石油产品分配公司	10 000 000
输油管公司	5 000 000
煤气充灌公司	10 000 000
共计	300 000 000

10. 伊拉克政府拒绝明确说明具体物品的个别价格、项目或部件类别,而只告知依照第 1210(1998)号决议拨给的 3 亿美元的资金划拨情况。

C. 概况

11. 目前的石油产量估计为每天 250 万桶。当地的目前消费量据称为每天 550 000 桶,而且每天仍有 70 000 桶出口到约旦,余下可供出口的石油为每天 1 880 000 桶。

12. 依照第四阶段规定平均出口的数量为每天 1 712 000 桶。

13. 据石油部预测,在收到并安装根据第四阶段规定购买的紧要部件之前,产量最多只能维持在每天 250 万桶的水平。据认为,在 2000 年 3 月份之前,产量不大可能超过目前的水平;其后,随着某些项目(如灌注水工程)发挥作用,出口能力预计会出现递增。

14. 石油部告知说,目前在生产方面遇到困难。在北部,有 25 口油井因有水问题而减产。据估计,在根据第四阶段规定订购的部件送达之前,还有 30 口井将会减产。在南部,除了在产油过程中出现水问题之外,还因没能灌注水而引起维持井压的问题。必须认识到,虽然主要的目的是至少把目前的生产水平维持到第五阶段之后,但与此同时却给采油井造成了无法挽回的损害。

D. 部件和设备

15. 第 13 节编列了第五阶段所需的产油部件和设备清单,该清单按生产公司细分,每家公司的资金划拨数额由伊拉克政府确定。这些拨款是根据已知需要核定的,其中考虑到了现有的生产问题。

16. 伊拉克国家石油销售组织由于没有提出任何要求,因而未获任何拨款。

17. 确定第五阶段内所需部件和设备的总体目的是维持目前的石油产量。水使油井不能产油,此外整个产油工业的出口前原油加工(如脱气,脱水)能力有限,这是由于紧要部件尚未运达和安装。故此,伊拉克政府已把重点转向优先照顾补偿减产损失的项目。除此以外,在第五阶段内还实施某些项目,这些项目将增加可用于维持生产的石油数量,并最终增加原油的出口。

18. 以下各节将具体说明配件和设备选择的原因和理由,其中较详细地述及每一营业公司的部件需求情况。在专家小组访问期间,经在伊拉克举行讨论,伊拉克政府按照第五阶段分配计划所提供的清单已经过修订。每个项目都作了适当的评注。

北方石油公司 - 85 000 000 美元

19. 伊拉克北方石油公司的目前已知产油能力是每天 1 197 000 桶,其中包括萨达姆油田的每天 20 000 桶。在过去八个月中,另外还有 25 口油井已开始水油并出,并且已经关闭(主要是在基尔库克和贝哈桑)。油井充水的趋势表明,还有 30 口井有可能会在第五阶段中关闭。脱水化学口如能运达并能持续提供,则应可缓解问题的一个方面,并使其中多数油井重新开放。

20. 但是,油井充水已给油井造成了某些永久性破坏,而且由于没有维修设施,唯一的解决办法只能是关闭受影响的油井。

21. 据认为,在阿瓦奈穹丘(基尔库克油田)、哈巴兹和贝哈桑钻打 25 口替代油井所需的化学品和其他物资数量是合理的。按目前市场价计算,这些物品的费用约占北方石油公司全部部件费用的三分之一(即约为 2 500 万至 3 000 万美元之间)。

北方石油公司库存中有一定数量的旧吸油管等可供使用;因而与拟补充的采油井数日本需配备的部件数量相比,实际所需的部件数量要少些。

22. 如不进行技术评估以及使用控制设备,那么就无法设想在上述活动中进行“价值效益”投资。因此,应在资金的总体使用范围内考虑有关井管钻孔、地质实验室、岩心取样、储油层模拟设施、钢绳等所需部件和设备的请求。按现价,这些活动所需的费用为 500 万至 700 万美元。

23. 应指出,拟议的 25 口垂直井将不会提高生产能力,但可能会维持在第四阶段中达到的水平,因为它们将穿透到已知垂直深度已减低的含油层。由于石油逐渐枯竭,油与水的界面已经通过储油层上升,而下层的水则流入生产套管的钻孔内。地面设施对油中含水非常敏感;在某些情况下,如水含量超过 0.5%,这些设施就不能运作。第四阶段脱水化学品如运抵,将会使未因储油层充水影响产油层流动特性而受损的一些油井重新开放。

南方石油公司 - 100 000 000 美元

24. 北鲁迈拉油田再开发项目包括整修 50 口现有油井,钻打 25 口新灌注水井和 15 口新油井。该项目预计将提高生产能力,每天多产油 200 000 桶。这个项目所需的部件和设备并无不合理,而且钻孔和完井材料费用估计是所估算数额的一半(即 5 000 万美元)。这些油井比北部的油井还要深,因而致使每口井的费用比北部油井高。

25. 如不进行技术评估以及使用控制设备,那么就无法设想在上述活动中进行“价值效益”投资。因此,应在资金的总体使用范围内接受就井管钻孔、地质实验室、岩心取样、油层模拟设施、钢绳等所需部件提出的请求。按现价,这些活动所需的费用为 700 万至 900 万美元。

26. 关于提供部件以便通过垂直钻井办法解决生产能力不断下降问题的成本效益,针对北方石油公司所作的上述评论同样也适用于南部。如果采用横井,则维持和

增加产油量所需的油井数目要比第五阶段建议少。地面设施所需部件和设备的性质将无变化,但储油层估测与开发钻探部件的清单和价格将需修改。

伊拉克钻井公司 - 20 000 000 美元

27. 由于必须钻打额外采油井和注水井以及整修现有采油井,因而需要掌握这一领域的专门知识。专家小组在访问附近的地点时收集了有关钻井公司和其他设施的一些相关情况。

28. 尤其是,多数所看到的钻井设备处于年久失修状态,并且自 1990 年来已弃置不用。如果购买新的部件和设备,那么完成北部和南部各方案所需 20 套钻井设备拟需要的部件和设备将超出拟议支出的费用。

石油项目公司 - 10 000 000 美元

29. 该公司代表营业公司在伊拉克各地建筑项目,并且承包工程。因此,它的需求涵盖建筑、维修以及测试新的和经修缮的建筑物,包括非破坏性检测等所有各方面。部件和设备清单中包括非破坏性检测设备、项目管理软件以及标准、建筑与维修设备。

石油勘探公司 - 5 000 000 美元

30. 整个储油层管理构想(即需要更替已损失的油井,并以加密采油井、灌注水井和整修油井来解决产量下降问题)是所提的第五阶段所需部件和设备清单的基本依据,它要求必须了解岩层构造和储油层内油与水的位置。所列的所有物品都是成功进行油田修复工作和开发方案的前提,并被看作是至关重要的。所要求的供资数额可能不足以支付所有已设想的项目的费用,它不大可能导致大大提高确定在哪里钻井或灌注水,或哪些油井将从油井整修中获得最大益处的能力。

31. 石油勘探公司所需部件和设备清单是一个不可分割的整体,删除其中任何物品都将有损第五阶段规定这些物品得出的价值。

32. 技术培训与支持通常是在运送部件和设备的时候提供的,并且包含在供应商的报价之中。如果不提供某种形式的援助来分析所收集到的数据,从而制定出一个有效的提高生产方案,那么许多物品将毫无用处。

北方炼油公司 - 32 000 000 美元

33. 贝吉炼油厂在以往的冲突中遭到严重破坏,但却仍是伊拉克境内最大、最现代的炼油厂。它是成品石油生产中的一个重要组成部分。该设施部件和设备清单是基于两个主要项目以及一般维修和保养:

(a) 加氢裂解装置。加氢裂解装置的主要功能是将多余的燃料油转变成汽油和柴油,这可以防止汽油和柴油的短缺。该装置的维修将使产品(尤其是汽油、煤油和粗柴油)质量更高。这将使发电厂可以烧燃料油,而不是象目前一样,燃烧原油,从而每天可节省出约 60 000 桶原油供出口;经提炼后的产品将大大降低含硫量,并且也将减少对环境的损害;

(b) 废水处理厂。这个严重受损的单位所需的部件已根据第四阶段规定获得批准。在完工之前,它需要进一步的施工,并且将会大大减少排放到底格里斯河及周围地下水层的废水的含油量;

(c) 机械设备部件和部件箱。与第四阶段下的此一设施部件相似,本部件和设备清单包含对炼油厂旋转和静态设备的多次维修,并且也同样将大大影响提炼制成品的质量。尤其是,向邻近发电厂供应燃料油以替代其目前使用的原油,将导致每天节省 100 000 桶原油可供出口。

中土炼油公司 - 10 000 000 美元

34. 达乌拉炼油厂位于巴格达市郊。所列出的部件和设备计划用于维修水处理厂和润滑油厂以及一般维修和保养。拟议的维修预计将使可供出口的原油数量每天最多可增加 60 000 桶,并使质量尚可的润滑油产量每年增加 100 000 吨:

(a) 水处理厂。需要一个完整的水处理厂,这将改善在巴格达附近直接排

入底格里斯河的污水的水质。

(b) 润滑油厂的部件。伊拉克生产的润滑油的质量仍然很差,致使维修期大大缩短,故障频生,消耗量增加。

南方炼油公司 - 5 000 000 美元

35. 巴士拉炼油厂位于南方,受到严重破坏。这家工厂的部件和设备清单旨在解决一些重大问题,包括为石油工业工人提供质量更好的饮用水,解决安全问题,提高精炼产品质量以便将原油用于出口:

(a) 旋转机械的一般部件。安装这些配件将可以生产高品位产品(粗柴油和燃油),这些产品可代替原油的直接使用。在这些部件安装完毕后,预计最终将替代每天 50 000 桶原油的产量。

(b) 改进饮用水系统并将水运到有关地点。巴士拉地区所供应的正常饮用水既不安全也无保障。所分配的部件用于维修水处理设施和将处理后的水运到南部炼油地区工地的水罐车。

(c) 环境保护仪器。这一组的部件和设备拟包含实验室设备、特别是气体分析仪器,以便提高炼油厂的安全和环境控制。

北方煤气公司 - 4 000 000 美元

36. 在基尔库克地区,部件和设备清单用于北方的煤气处理厂。这些工厂在原油出口之前从中提取煤气。维持这些工厂运行并提高其效率将能够使原油得到更有效的处理,从而增加提取出的供发电厂用作动力的煤气数量,进而增加供出口的原油数量。

南方煤气公司 - 4 000 000 美元

37. 在巴士拉地区,部件和设备清单用于南方各煤气处理厂、饮用水运输设备、安全设备和在 Anzalah 地区铺设一条 25 公里的输油管。铺设这一输油管将能够把原油从南方生产区运到北方,再从那里经由基尔库克-尤穆尔塔勒克管线出口

到杰伊汉。

石油产品分配公司 - 10 000 000 美元

38. 新设立了这一公司以提高在全国分配石油产品的效率。由于某些地区的产品分配管线网受到严重破坏,且分配地域广阔,精炼产品目前主要用汽车运送。

39. 为这一设施提供的部件和设备包括汽车、燃料加注器、计量器和有关设备、电器设备配件和在重要地点建造一些大容积储存罐。

40. 所列部件预期产生的效益是大大减少渗漏。渗漏占分配的产品数量的 7 % 左右,显然对环境造成不利影响。减少这些损失(有些只是因燃料加注泵的垫圈损坏而引起的)将减少精炼石油产品的需求量,因而可有更多的原油出口。

输油管公司 - 5 000 000 美元

41. 这一部件和设备清单用于修理向伊拉克全国分配精炼石油产品的油库、泵油站和输油管网络。由于破坏严重,产品目前由公路车辆运送,效率低,不安全且不可靠;必须开展这方面的修理工作。

煤气充灌公司 - 10 000 000 美元

42. 部件和设备清单中大部分物品重复了在第四阶段为煤气充灌公司申请的物品,但当时没有足够的资金。伊拉克大约有 1 200 万个液化丙烷罐,罐龄为 10 至 30 年。罐的正常寿命最长为 15 年,这需要每年进行罐压测试 - 伊拉克目前并没有这样做。每个罐在伊拉克每年充气大约 10 次,而国际标准是每年 5 至 7 次。煤气充灌公司还修理损坏的气罐,这在国际上禁止的。每年大约销毁 250 000 个气罐,除了在第四阶段申请的气罐外,自 1989 年来没有购买过新的气罐。

43. 清单包括 500 000 个替换气罐、部件、安全和维修设备以及协助发现漏气的液化丙烷气罐的化学品。

E. 结论

44. 专家小组的一般看法是伊拉克政府提供的部件和设备清单是维持并最终增加现有产量的可行做法,虽然它反映还继续依赖已经过时的开发油田方针。

45. 关于专家小组就其 1998 年 3 月访问提交的报告,可以说迄今为止情况没有重大改善,这主要是因为第四阶段订购的部件和设备刚开始实际交付。专家组同意伊拉克石油部的看法,即产量在 2000 年 3 月之前不可能增加。伊拉克政府此时的主要目标是在第五阶段期间和其后维持目前的产量。

46. 最后,专家小组注意到第四阶段和第五阶段提交的清单似乎有重复之处。如专家小组上次报告所述,这一明显重复的原因是第四阶段要求提供的部件和设备的价格略高于预计金额,这将超出为部件和设备分拨的 3 亿美元的金額。

附录

石油工程术语

横井

油田开发的工程方法在 1990 年代初有重大发展,在概念上有一个飞跃,但这一飞跃却简单得出奇。在实现一定技术革新的同时,人们放弃在地上垂直钻井的做法,而想在井底接近含油层时把井横转过来,沿含油层钻进,而不是穿透含油层。挖掘所谓的“派生”井的技术从 1960 年代末就开始采用,但在钻井设备和材料得到改进后才证实钻孔可以横向在含油层中行进,而避开含油层下面的水。

加氢裂解

加氢裂解在原油精炼中发挥重要作用,它通过裂解残油来生产洁净的运输用燃油。

插补钻探/插补井

伊拉克大多数油田占地数十平方英里,含油层距离地面相对较近,特别是在北方。开采原油的常规方法是直接钻井到储油层;基尔库克油田的油井相互间隔大约 3 000 英尺(即半英里)。当其中一些油井开始出水而地面设施无法处理时,这些油井就被关掉。为了有效地开采这些相距很远油井之间的储油层中的原油,于是钻探插补井,因为新钻的竖井穿透富油石层的可能性至少是 90 %。

注水

随着油被抽出储油层,压力逐渐降低,生产指数(和产量)也下降,通常是大幅度下降。可以通过将气体和/或水注入储油层来保持一定的压力,而大大推迟这种情况的发生。通常将大量的水注入储油层的底部,以协助最大限度地开采原油。水必须用杀生物药剂处理、过滤并加压灌注才有效。

灌注井

用于灌注水或气体以维持压力的井。

以桶/日为单位的生产能力

伊拉克 24 个油田中的大约 450 口油井在理想条件下在 24 小时内可以生产最高总产量,即管线不渗漏,处理设施不出故障,也不缺除气设备和脱水化学品。

油井生产力指数

按每个储油层压力单位计算,每口油井每天可生产的原油计量。在特定的储油层中,横井的生产力指数通常大大高于穿透同一储油层的竖井的生产力指数,横井产量一般是邻近竖井的 2 倍至 10 倍。

穿孔

为了让原油从储油层流出,需要在井的底部开出一条通往地面生产设施的通道。可以用一根线吊住一小捆炸药放到井下,从套管底部“射”孔,而使储油层的岩石与钻井本身连接起来。

出水

伊拉克的大多数储油层中还有许多盐水层。原油就飘浮在盐水上。储油层中有各类多孔岩石,岩石中含有原油和水。开始时原油上方还有一些气体。随着原油被抽取出储油层,水占据了原油留下的空间。如果原油抽取太快,或抽取时间很长,储油层中的水也出现在油井生产出的液体中——这一原油被称为“湿原油”或“参水”。

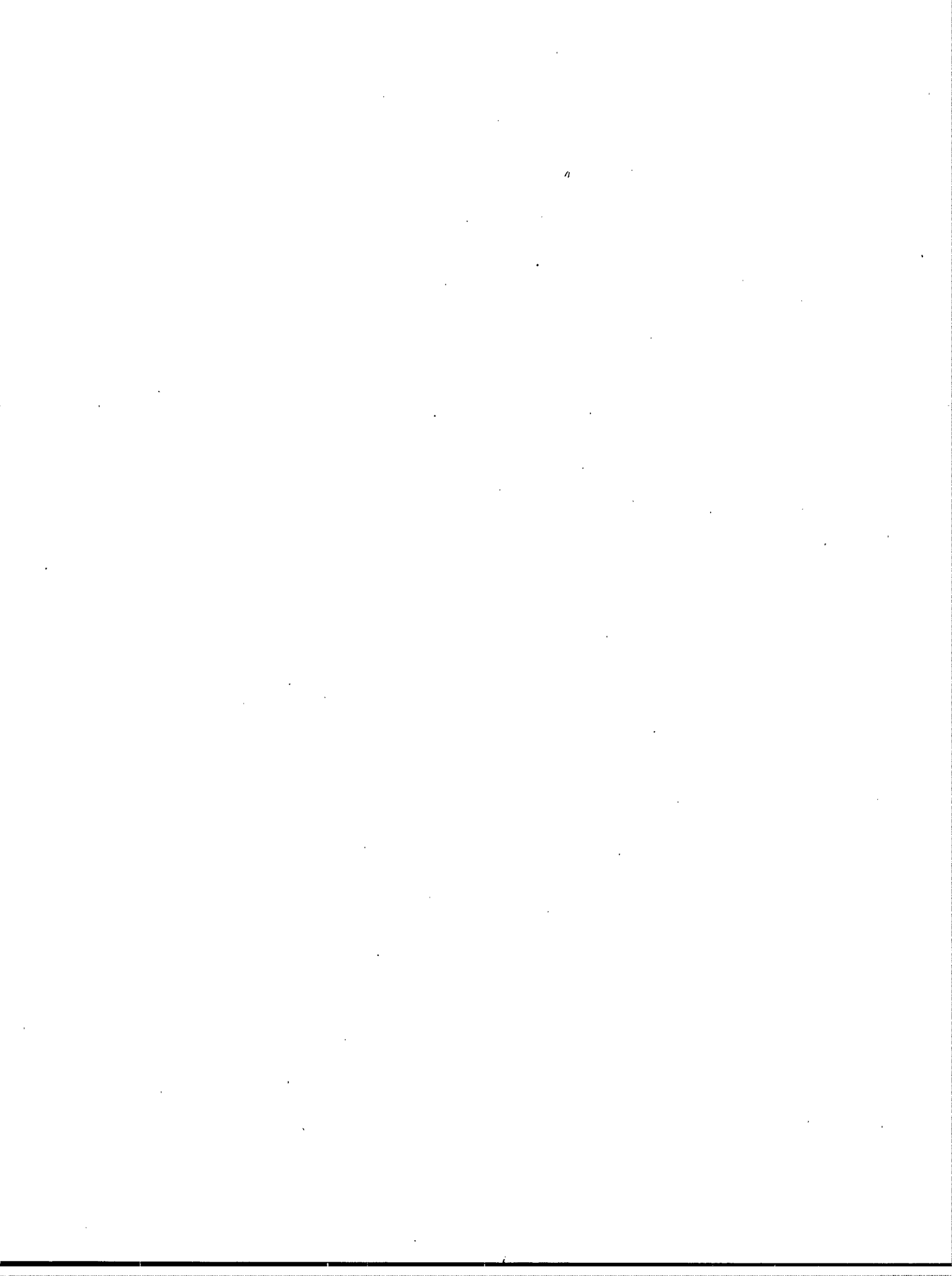
三维地震

为了精确确定含油岩层的位置,在发现油田后,就将整个油田地表面积划分成一个个小格,用现代声波技术进行探测。由此产生地表岩石的三维“图象”,可协助确定最佳钻井位置,实现开采岩石下的储油的最佳生产和开采率。

绳索用具

油井钻探完毕后,它就与钢管(套管)和其他设备垂直接通以便对产出的原油进行

控制和量测。时间久了,“井下”的设备会受到腐蚀而需要替换。替换阀门(它可能在数千英尺深的井下)的最简便方法是用一根细钢绳把各种工具吊入井下,把要替换的部件取出。用于进行这一工作的工具就是绳索用具(系在用马达驱动的卷筒上的一根非常长的钢绳)。



Annex II

Phase five oil sector requirements - list of spare parts and equipment

/...

PHASE V OIL SECTOR REQUIREMENTS

COMPANY NAME	FUNDS ALLOCATED X 1000 \$.
NORTH OIL COMPANY	85 000
SOUTH OIL COMPANY	100 000
IRAQI DRILLING COMPANY	20 000
OIL PROJECTS COMPANY	10 000
OIL EXPLORATION COMPANY	5 000
NORTH REFINERIES COMPANY	32 000
MIDLAND REFINERIES COMPANY	10 000
SOUTH REFINERIES COMPANY	5 000
NORTH GAS COMPANY	4 000
SOUTH GAS COMPANY	4 000
OIL PRODUCT DISTRIBUTION COMPANY	10 000
OIL PIPELINES COMPANY	5 000
GAS FILLING COMPANY	10 000
GRAND TOTAL	

ALLOCATED BY

UNSCR (1210)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
	DRILLING AND WORKOVERS REQUIREMENTS FOR PRODUCTION MAINTENANCE			
	A. DRILLING OF 25 NEW WELLS:			Parts for drilling 25 new wells resulting in 150,000 bopd increase in production
08-05-00001	- CASING (VARIOUS SIZES, GRADES AND WEIGHTS).	M.	80 000	"
08-05-00002	- TUBING (VARIOUS SIZES, GRADES AND WEIGHTS)	M.	38 000	"
08-05-00003	- WELL HEADS & XMAS TREES (VARIOUS).	Assembly	25	"
08-05-00004	- CASING ACCESSORIES (VARIOUS).	NOS.	3 000	"
08-05-00005	- UNCEMENTED LINER HANGER 4 1/2" x 7".	SET	15	"
08-05-00006	- CEMENTED LINER HANGER 4 1/2 "x 7".	SET	2	"
08-05-00007	- ROCK BITS.	NOS.	250	"
08-05-00008	- NOZZELS (VARIOUS).	SET	200	"
08-05-00009	- CORE HEADFOR TAKING CORSIN DEVELOPMENT WELLS.	NO.	1	"
08-05-00010	- THREAD SEAL COMPOUND.	CAN/G	200	"
08-05-00011	- THREAD LOCK.	KIT	200	"
08-05-00012	- OIL WELL CEMENT & ADDITIVES.	TON	550	"
08-05-00013	- MUD MATERIALS (DRILLING FLUIDS SUCH US:- BARYTES, BENTONITE, FCL, CMC,LV,SODA ASH,HCE, HCL,GILTONZ, CALCHLORIDE, SODIUM BICARB,CAUSTIC SODA,RHODOPOL,POLYMER CELLOLOSE, C LIGNITE, CMC-HV,FCL,STARCH,IMCO SPOT, ANTIFOAM, XCPOLYMER SODIUM DIOCOMATE, ATA BULGITE, ETC	TON	8 300	"

ESTABLISHMENT NAME: NORTH OIL COMPANY

LOCATION : ALL NOC FIELDS

(MAINLY KIRKUK, KHABBAZ, & BAI HASSAN)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
	<u>B. WORK OVER & LONG TERM TESTING OF "20" WELLS:</u>			Workover of 20 new wells increasing production by 30,000 bopd
08-05-00014	- X-MAS TREE & TUBING HANGER FOR SOUR SERVICE (VARIOUS SIZES).	Assembly	20	"
08-05-00015	- SPARE PARTS FOR WELL HEADS.	SET	10	"
08-05-00016	- DOUBLE STUDDED ADAPTORS & ACCESSORIES.	NOS.	15	"
08-05-00017	- UNCEMENTED LINER HANGER 4 1/2 " X 7"	SET	15	"
08-05-00018	- TUBING (VARIOUS SIZES)GRADES AND WEIGHTS).	M.	35 000	"
08-05-00019	- CASING 4 1/2".	M.	5 000	"
08-05-00020	- X-OVER SUBS FOR TUBING (VARIOUS).	NO.	100	"
08-05-00021	- SINGLE PACKER WITH ALL ACCESSORIES.	SET	12	"
08-05-00022	- DUAL PACKER WITH ALL ACCESSORIES & SPARE PARTS.	SET	3	"
08-05-00023	- ROCK BITS (VARIOUS SIZES).	NO.	40	"
08-05-00024	- MUD MATERIALS (DRILLING FLUIDS AS IN CODE 13 ABOVE	TON	2 000	"
08-05-00025	- BRIDGE PLUGS.	NO.	12	"
08-05-00026	- WELL PERFORATION CHARGES, PRIMA CORD, STRAPS AND DETONATORS FOR (15) WELLS.	LOT	1	"

MINISTRY OF OIL
 ESTABLISHMENT NAME: NORTH OIL COMPANY
 LOCATION : ALL NOC FIELDS
 (MAINLY KIRKUK , KHABBAZ , & BAI HASSAN)
 SHEET NO: 3 OF 13

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
	<u>C. SUPPORTING MATERIALS AND EQUIPMENT FOR WELLS</u> <u>PRODUCTION MAINTENANCE:</u>			
08-05-00027	- LAB. TESTING APPARTOUS, COMPLETE WITH ACCESSORIES FOR OIL, GAS AND WATER QUALITY CONTROL	SET	25	General laboratory apparatus for product quality control
08-05-00028	- LAB. TESTING EQUIPMENT, MATERIALS & SPARES FOR ENVIRONMENT POLLUTION CONTROL.	SET	6	Laboratory apparatus for air pollution analyses
08-05-00029	- LAB TESTING EQUIPMENT, COMPLETE WITH ACCESSORIES FOR GEOLOGICAL CONTROL.	SET	15	Standard set of laboratory equipment for geological survey
08-05-00030	- LAB. TESTING EQUIPMENT, MATERIALS & SPARES FOR DRILLING FLUID.	SET	5	Laboratory equipment for analysis of drilling fluids "on-site"
08-05-00031	- CEMENTING UNIT (COMPLETE WITH ACCESSORIES).	SET	2	Maintenance unit
08-05-00032	- SPARE PARTS FOR CEMENTING UNIT & EQUIPMENT (GENERAL & MECHANICAL)	SET	1	Spare Parts for above
08-05-00033	- FORMATION TESTING TRUCK FOR WELL SERVICES	SET	2	Transport for well services
08-05-00034	- WELL LOGGING SERVICES AND LOG INTERPRETATION PACKAGE	SET	1	Software and hardware for well logging
08-05-00035	- RESERVOIR SIMULATION PACKAGE.	SET	1	Complete reservoir software and hardware package
08-05-00036	- COILED TUBING UNIT AND NITROGEN UNIT (TRAILER TYPE).	EACH	1	Equipment for well logging
08-05-00037	- WIRE LINE EQUIPMENT AND SPARES FOR FIELD MEASUREMENT AND EQUIPMENT FOR WELL COMPLETION	SET	1	Wire line equipment for well logging
08-05-00038	- SPARES (RUBBER LINED, VALVES AND FITTINGS) FOR HYDROCHLORIC ACID STORAGE PLANT.	SET	1	Spares for exploration

ESTABLISHMENT NAME: NORTH OIL COMPANY

LOCATION: BABA UNDERGROUND STORAGE PROJECT &
JAMBUR FIELD

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00039	REPAIR OF THREE BRINE PONDS IN UNDER GROUND STORAGE PROJECT . THIS INCLUDES THE FOLLOWING ITEMS: - LINING BY SPECIAL PLASTIC LAYERS - PERMEABLE LAYER - SPECIAL MATERIAL LAYER FOR POND INCLUDING SIDES - SPECIAL PLASTIC COVER FOR POND - EQUIPMENT FOR POND GRADING ; LINING & WELDING OF PLASTIC LAYERS.	M2 M2 M2 M2 LOT	60 000 33 000 15 000 60 000 3	Repair of brine storage reservoirs for use in LPG production and storage
08-05-00040	- UNDER GROUND STORAGE CAVITIES ECHOLOG SURVEY FOR 7 CAVITIES (SERVICE)	SET	7	Service contract for underground LPG storage facilities
08-05-00041	- SPECIAL WELL HEADS FOR UNDER GROUND STORAGE CAVITIES, OF 9 5/8" X7" X5"X2000 PSI	SET	5	Well heads for same
08-05-00042	- CRUDE PUMPS WITH ELECT. MOTORS FOR JAMBUR SOUTH DEG. STN. CAPACITY = 10000 BPD SP. GR. = 0.7000-0.8350 SUCTION PRESSURE = ATM DISCH. PRESSURE = 400 PSIG	SET	3	Condensate pumps which would increase export by 5,000 bpd

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00043	<p><u>AIN ZALAH - ITZA PUMPING AND TRANSPORTATION EQUIPMENT INCLUDES:</u></p> <ul style="list-style-type: none"> - CRUDE PUMP / MOTOR CAPACITY 10000 BOPD EACH SUCTION PRESSURE = ATM DISCHARGE PRESSURE = 450 PSIG COMPLETE WITH TRANSFORMERS, SWITCH GEAR, MCC & ALL REQUIRED CABLES AND ELECTRICAL POWER SUPPLY TO THE ABOVE PUMPS AND ONE MAIN TRANSFORMER. - PIPE OF 12" SIZE WITH ALL NECESSARY VALVES AND FITTINGS. 	SET	3	New line section and pumping facilities connecting Ain Zalah and IT-2 increasing export potential by 17,000 bpd
08-05-00044	<p><u>WATER INJECTION PUMPS/AIN ZALAH:</u></p> <ul style="list-style-type: none"> - WATER PUMP/ MOTOR SET: CAPACITY 10000 BOPD EACH SUCTION PRESSURE = ATM DISCHARGE PRESSURE = 600 PSIG COMPLETE WITH TRANSFORMER, SWITCH GEAR, MCC & ALL REQUIRED CABLES AND ELECTRICAL POWER SUPPLY TO THE ABOVE MOTORS. 	SET	2	Water injection pumps for Ain Zalah creating new crude production for transfer as in above
08-05-00045	<p><u>SPARES FOR AIN ZALAH OIL FIELD INCLUDING:</u></p> <ul style="list-style-type: none"> - SFAIA AIR COMPRESSOR, WATER TREATMENT SYSTEM, UPS). 	SET	5	As above
08-05-00046	<p><u>SPARE PARTS FOR EAST BAGHDAD FIELD EQUIPMENT INCLUDING:</u></p> <ul style="list-style-type: none"> - GAS COMPRESSOR, CONTROL ROOM COMPUTER, F. C. V, SWITCH GEAR, S/D VALVES. 	SET	8	Complimentary equipment and spares allowing more efficient transfer to refinery releasing up to 20,000 bpd crude for export

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00047	WET CRUDE TREATMENT EQUIPMENT FOR THE FOLLOWING FIELDS:			
	- BAI HASSAN - 5 TRAINS X 35000 BOPD OF STOCK TANK CONDITIONS	TRAIN	5	
	- AVANAH - 3 TRAINS X 50000 BOPD OF STOCK TANK CONDITIONS.	TRAIN	3	
	- AIN ZALAH - 1 TRAIN X 15000 BOPD STOCK TANK CONDITIONS.	TRAIN	1	
	H TRAIN INCLUDES THE FOLLOWING: - TRANSFORMERS, SWITCH GEARS, MCC, CABLES AND OTHER ELECTRICAL POWER SUPPLY AND DISTRIBUTION EQUIPMENT. - CONTROL SYSTEM FOR FIELD AND SCADA SYSTEM CONTROL, AND CABLES... ETC. - ALL NECESSARY PUMPS FOR CRUDE OIL, WATER & CHEMICAL INJECTION. - ALL NECESSARY TANKS FOR CRUDE OIL & WATER. DEHYDRATION DESALTING EQUIPMENT WITH ALL REQUIRED ACCESSORIES. - EFFLUENT WATER TREATMENT EQUIPMENT.			
08-05-00048	- PHASE (I) OF THE DEVELOPMENT OF KHURMALA DOME (PIPES, MANIFOLDS, FITTINGS ...etc.) & THE COMMENCEMENT OF SURFACE INSTALLATION:			
	- FLOWLINES (6-10")	KM	20	
	- TRUNK LINE 20"	KM	22	
	- MANIFOLD	SET	1	
	- VALVES & FITTINGS	LOT	1	
	- CONTRACT		1	
				New production from the 3 rd dome of KIRKUK field creating 15,000 bpd production. This development will take minimum 4 months after arrival of equipment

ESTABLISHMENT NAME: NORTH OIL COMPANY

LOCATION: KIRKUK, BAI HASSAN & JAMBUR FIELD

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00049	- CORROSION INHIBITOR PUMPS FOR GAS COMPRESSOR STATION COMPLETE WITH E. MOTOR CAPACITY RANGE FROM 10 TO 150 LITER/DAY DISCHARGE PRESSURE RANGE FROM 4.0 TO 40 BAR	NOS.	30	Replacement pumps not ordered under Phase 4 owing to lack of funds
08-05-00050	- TRI ETHYLENE GLYCOLE PUMPS CAPACITY BETWEEN 7.0-20 M3/HR DISCHARGE PRESSURE 40 BAR	NOS.	24	Same as above
08-05-00051	CHEMICALS FOR PRODUCTION & PROCESSING: - DEMULSIFIER - CORROSION INHIBITOR - POLYELECTROLYTE - O2 SCAVENGER BSED FOR AFFLUENT WATER TREATMENT - BIOCIDES: TO KILL BACTERIA IN AFFLUENT-WATER. - ELEMINOX: ELIMINATES OXYGEN IN BOILER WATER - CaO - SODIUM CARBONATE - ALGESTAT: FOR NEMOVAL OF AIGIE IN COOLING TOWER & BOILERS - SODIUM TRI PHOSPHATE - CORROSION AND SCALE INHIBITOR FOR COOLING TOWERS.	LTR LTR LTR LTR LTR KG LTR LTR LTR KG LTR	200 000 120 000 60 000 40 000 20 000 200 4 000 8 000 10 000 200 20 000	Chemicals for improving production processing

MINISTRY OF OIL
SHEET NO: 8 OF 13
ESTABLISHMENT NAME: NORTH OIL COMPANY
LOCATION: PROCESS PLANT & KIRKUK FIELDS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00052	- SLOP SYSTEM UNIT PUMP 3" X 4" CAP - (50) CMPH HEAD - (80) PSI S. PRES. - ATM UNIT COMPLETE WITH ELECT. MOTOR	NOS.	4	Improving slop drainage and reducing environmental damage
08-05-00053	- MOBILE STEAM GENERATOR (BOILER): 5 TPH	NOS.	2	Required for steaming out tanks before repair
08-05-00054	- UPGRADING OF OLD ITP/L MAIN PUMPS FROM 5000 M3/H TO 7000 M3/H	NOS.	4	Improving pumping capability for export
08-05-00055	- DIESEL DRIVEN LOW LIFT PUMP	NOS.	6	Maintenance & pollution control
08-05-00056	- DIESEL DRIVEN HIGH DISCHARGE PUMP	NOS.	6	Maintenance & pollution control
08-05-00057	- CHAIN SPANNER (HEAVY DUTY)	NOS.	20	Maintenance
08-05-00058	- MEASURING INSTRUMENTS FOR ENVIRONMENTAL PROTECTION.	SET	10	Environmental control

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CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00059	REHABILITATION OF ITP METERING STATION (FOR 40 & 46 INCH PIPE LINE): FIELD INSTRUMENTS FLOW COMPUTERS PROVER CONTROL SYSTEM ELECTRICALLY DRIVEN SLOP PUMP	SYSTEM	2	Allows measurement of oil at Zahko for export where only one line currently metered
08-05-00060	- REPLACEMENT OF THE EXISTING OBSOLETE TELEMETRY / TELECONTROL SYSTEM OF ITP PUMP STATIONS (SCADA).	SYSTEM	1	Communication between ITP pumping stations
08-05-00061	- REWINDING OF ITP,KI MAIN MOTOR AND POWER STATION EXCITERS(ABROAD)	NOS.	6	Repair of electrical motors for export pumps to be effected overseas
08-05-00062	- INTELLIGENT PIGGING OF 32 INCH PIPE LINE 340 KM LONG & NECESSARY REPAIR (SUPPLY OF BIG TRABS, FITTINGS AND 32" LINEPIPE: LENGTH ACCORDING TO TEST RESULTS)	LOT	1	Intelligent pigging of pipeline from KI to Syrian border for which no funds available under Phase 4
08-05-00063	- SLUDGE REMOVAL CRUDE OIL TANKS AT KI DEPOT	CONTR.	1	Pollution control
08-05-00064	COMPLETION OF SADDAM OIL FIELD PROJECT INCLUDING: - COMPLETION OF 132/33 KV SUBSTATION FOR SADDAM OIL FIELD - COMPLETION OF SADDAM OIL FIELD PROJECT WHICH INCLUDE: - DIFFERENT ELECTRICALLY DRIVEN CRUDE / WATER / CHEMICAL PUMP - DIFFERENT VESSELS - WATER TREATMENT & SLOP SYSTEM - FLARE IGNITION SYSTEM - MAIN CRUDE TRANSFER PUMPS - VARIOUS INSTRUMENTATION , FITTINGS & VALVES	LOT	1	Completion of repairs to Saddam field resulting in further 25,000 bpd crude oil for export.

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00065	- GAS COMPRESSOR - GAS TURBINE COMPLETE WITH ALL ACC. AS A 2 ND TRAIN FOR AB/8.	SET	1	All items refer to increasing gas treatment and production which constrain crude oil export
08-05-00066	- REPLACEMENT OF SOLAR GAS TURBINE TYPE : T4700	SET	1	Same
08-05-00067	- HITACHI GAS TURBINE OVERHAUL SPARE PARTS.	SET	4	Same
08-05-00068	- REPLACEMENT OF GAS COMPRESSOR OF AB/1.	NOS.	1	Same
08-05-00069	- SPARES FOR THERMODYN COMPRESSORS.	SET	1	Same
08-05-00070	- ONE (2+2 MB/S) & TWO (2 MB/S) DIGITAL RADIO LINKS OPERATING IN THE 2.6 GHZ BAND IN HSB MODE COMPLETE WITH MUX & TERMINATION UNITS (LB, CB, SUB & EXCH) & SUPERVISORY SYSTEM TO MONITOR SYSTEM PERFORMANCE, COMPLETE WITH POWER SUPPLY (CHARGER & BATT.), TEST SET & RECOMMENDED SPARE PARTS	LINK	3	Control of operations in Gas Compressor Stations

MINISTRY OF OIL
ESTABLISHMENT NAME: NORTH OIL COMPANY LOCATION: ALL COMPANY AREAS

SHEET NO: 11 OF 13

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00071	- VALVES & FITTING WITH VARIOUS RATINGS & CLASSES FOR THE CONNECTIONS OF WELLS. - FLOW LINES 4.6,8,10 INCH FOR WELL CONNECTIONS.	SET	25	All items cover safety, maintenance and storage
08-05-00072	- WATER INJECTION P/L RIVER CROSSING (20) INCH (ZAB).	KM	35	"
08-05-00073	- REPLACEMENT OF GAS TURBINE CONTROL PANEL & ACC. IN WATER INJECTION & AVANAH (P.S).	KM	2	"
08-05-00074	- SWITCH GEAR, CABLE, ACC. FOR SUBMERSIBLE OIL PUMPS AT JABEL BOOR	SETS	12	"
08-05-00075	- CRUDE OIL TANK + PIPING WORK, INSTRUMENTATION & ELECTRICALS (FOR OPERATION FROM K3 CONTROL ROOM)	SET	3	"
08-05-00076	- SULZER TURBINES ROTORS WITH THE NECESSARY INSTRUMENTATION & CONTROL AT K3	SET	3	"
08-05-00077	- ELECTRICAL DRIVEN MULTI-STAGE PUMP (6 X 6) INCH AT K3.	NOS.	3	"
08-05-00078	- ELECTRICAL DRIVEN PUMP (4 X 4) INCH AT K3	NOS.	10	"
08-05-00079	- FLOW METER (3 X 3) AT K3.	NOS.	10	"
08-05-00080	- SUBMERSIBLE PUMP AT K3.	NOS.	2	"
08-05-00081	- AIR BLOWER AT K3.	NOS.	2	"
08-05-00082	- SLOP / SEWAGE / DRAINAGE UNITS AT K3.	NOS.	5	"
08-05-00083	- AIR HEAT EXCHANGER AT K3.	NOS.	2	"
08-05-00084	- AIR DRYER WITH ELECTRICAL HEATER COMPLETE AT K3.	NOS.	2	"
08-05-00085	- WIRE ROPE (19 MM) AT K3.	METER	1100	"
08-05-00086	- FIRE FIGHTING PUMP AT K3.	NOS.	2	"
08-05-00087	- SPARE PARTS FOR PUMPS & AIR COMPRESSORS AT K3.	LOT	2	"
08-05-00088	- SPARES (MECH. ELECTRICAL, INSTRUMENT) FOR: PROCESS PLANT , PUMPING & DEGASSING STATIONS.	LOT	9	"
08-05-00089	- VARIOUS PIPES , FITTING & VALVES.	KM	15	"
08-05-00090	- SPARES FOR STEAM & GAS TURBINE GENERATORS (ELECTRICAL, INSTRUMENTS).	NOS.	700	"
08-05-00091	- SPARES (MECH.) FOR WATER PUMP STATION (ZAB)	LOT	4	"
		SET	4	"

MINISTRY OF OIL

ESTABLISHMENT NAME: NORTH OIL COMPANY

LOCATION: ALL COMPANY AREAS

SHEET NO: 12 OF 13

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00092	- AMBULANCES (COMPANY HOSPITAL & FIRE SERVICE) WITH RECOMMENDED SPARE PARTS	NOS.	4	North Oil Company has it's own hospital and requires ambulances
08-05-00093	- UNIVERSAL FIRE FIGHTING TRUCK (WATER, FOAM, POWDER) WATER - (5000-6000) LT., FOAM COMP - (2000) LT., DRY POWDER - (1000) KG WITH RECOMMENDED SPARE PARTS	NOS.	3	Safety
08-05-00094	- WATER TANK - TRUCK, CAP - (17000) LT, PUMP CAP - (1800) LPM, AT (10) BAR DRIVE P. T. O WITH RECOMMENDED SPARE PARTS	NOS.	2	Safety
08-05-00095	- CRANE 100-120 TONS WITH RECOMMENDED SPARE PARTS	NOS.	2	Maintenance
08-05-00096	- WELDING MACHINES (DIESEL DRIVEN) WITH RECOMMENDED SPARE PARTS	SET	10	Maintenance
08-05-00097	- MOBILE AIR COMPRESSORS DIESEL DRIVEN WITH RECOMMENDED SPARE PARTS	SET	14	Maintenance
08-05-00098	- BULLDOZER WITH RECOMMENDED SPARE PARTS	NOS.	2	Maintenance
08-05-00099	- MECHANICAL SHOVEL WITH RECOMMENDED SPARE PARTS	NOS.	2	Maintenance
08-05-00100	- (1-3) MW ELECTRIC POWER GENERATOR POWERED BY A GAS TURBINE COMPLETE WITH ALL ACCESSORIES (K3) WITH RECOMMENDED SPARE PARTS	SET	1	Maintenance
08-05-00101	- DIESEL DRIVEN GENERATING SETS 50 - 250 KVA. WITH RECOMMENDED SPARE PARTS	SET	4	Maintenance
08-05-00102	- OIL REMOVAL (SKIMMER), TWO SPEED MODEL, ROTATING OIL DRUM SKIMMER SUPPORTED BY: FLOATS MADE OF LIGHT ALLOY WITH RECOMMENDED SPARE PARTS	NOS.	2	Environmental control
08-05-00103	- DRILLING PIPES THREADING MACHINE. WITH RECOMMENDED SPARE PARTS	NOS.	1	Maintenance
08-05-00104	- EXCAVATOR (HYDRAULIC) WITH RECOMMENDED SPARE PARTS	NOS.	2	Maintenance

MINISTRY OF OIL
SHEET NO: 13 OF 13
ESTABLISHMENT NAME: NORTH OIL COMPANY
LOCATION: ALL COMPANY AREAS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
	SPARES REQUIRED FOR THE OVERHAUL OF DEFUNCT FIELD EQUIPMENTS COMPLETE ENGINES FOR:			All items this sector refer to general maintenance and vehicular refurbishment
08-05-00105	- BULLDOZER KOMAT SU D - 155	NOS.	4	"
08-05-00106	- WHEEL LOADER KAWA SAKI 70.B	NOS.	4	"
08-05-00107	- SURFACE GRADER GD 37 - 6 H	NOS.	2	"
08-05-00108	- CRANES TYPES TADANO, KATO & GROVE	NOS.	6	"
08-05-00109	- EXCAVATORS CAT., MITSUBISHI & MERCEDES	NOS.	10	"
08-05-00110	- LIFTING TRUCK FD 30 & FD 50	NOS.	2	"
08-05-00111	- LORRY : SCANIA, TOYOTA & MERCEDES	NOS.	24	"
08-05-00112	- TRAILER : (LORRY TRUCK & TIP TRUCKS) SCANIA, MERCEDES, NISSAN & HINO	NOS.	50	"
08-05-00113	- HYDRAULIC PLATFORM	NOS.	1	"

ESTABLISHMENT NAME: SOUTH OIL COMPANY
 LOCATION : ALL FIELDS

DRILLING & COMPLETION & WORKOVER MATERIALS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00114	- X- MASS TREE	SETS	15	This sector covers the drilling of 15 wells, and perforation of 25 wells for water injection
08-05-00115	- CASING PIPE SIZE (7")	M	20000	"
08-05-00116	- CASING ACCESSORIES	ITEMS	15	"
08-05-00117	- DRILLING BITS	NOS	100	"
08-05-00118	- TUBING 2 7/8 INCH	M	25 000	"
08-05-00119	- TUBING 3 1/2 INCH	M	135 000	"
08-05-00120	- PERMANENT PRODUCTION PACKERS	SETS	85	"
08-05-00121	- CASING PATCHES	SETS	15	"
08-05-00122	- CEMENT RETAINER	SETS	25	"
08-05-00123	- THROUGH TUBING BRIDGE PLUGS (T.B.T.)	SETS	20	"
08-05-00124	- PERFORATION ACCESSORIES	ITEMS	60	"
08-05-00125	- PERFORATION CHARGES	NO.	50 000	"
08-05-00126	- WELLHEAD GATE VALVES OF VARIOUS SIZES	NOS.	150	"
08-05-00127	- CHEMICALS FOR DRILLING & COMPLETION FLUIDS	ITEMS	15	"
08-05-00128	- CHEMICAL ADDITIVES FOR CEMENT	ITEMS	10	"
08-05-00129	- CHEMICAL ADDITIVES FOR ACID	ITEMS	10	"
08-05-00130	- WATER INJECTION PUMPING UNITS C/W RECOMMENDED SPARE PARTS	SETS	5	"
08-05-00131	- ELECTRICAL SUBMERSIBLE PUMPS WITH ACCESSORIES C/W RECOMMENDED SPARE PARTS	SETS	8	"
08-05-00132	- COILED TUBING UNIT AND ACCESSORIES	UNIT	2	"

MINISTRY OF OIL
 ESTABLISHMENT NAME: SOUTH OIL COMPANY
 LOCATION : ALL FIELDS

SHEET NO. 2 OF 25

RESERVOIR MONITORING AND LABORATORY ANALYSIS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00133	- ACID TRAILER (TO TRANSPORT ACID AND COMPLETION FLUIDS) WITH SPARES	SET	4	All items refer to reservoir maintenance and well workovers
08-05-00134	- ELECTRIC MOTORS FOR MIXING CEMENT WITH SPARES & CONTROLS	SET	20	"
08-05-00135	- TRAILER - MOUNTED WIRELINE UNIT WITH ACCESSORIES AND SPARES	UNIT	3	"
08-05-00136	- LIGHT - WEIGHT LUBRICATOR WITH BOP .	SET	5	"
08-05-00137	- WEIGHT INDICATOR FOR SLICK - LINE .	NOS	10	"
08-05-00138	- EQUIPMENT & ACCESSORIES FOR REPAIR OF LOGGING UNITS .	SET	3	"
08-05-00139	- FIELD LAB . MATERIALS AND EQUIPMENT .	ITEMS	40	"
08-05-00140	- CHEMICALS FOR LAB. ANALYSIS	ITEMS	50	"
08-05-00141	- LABORATORY EQUIPMENT FOR GAS AND CRUDE OIL ANALYSIS	ITEMS	25	"
08-05-00142	- EQUIPMENT FOR GEOLOGICAL LABORATORY	ITEMS	10	"
08-05-00143	- RESERVOIR MONITORING SOFTWARE	SET	5	"

MINISTRY OF OIL

ESTABLISHMENT NAME: SOUTH OIL COMPANY

LOCATION : ALL FIELDS

SHEET NO. 3 OF 25

SPARE PARTS FOR FIELD EQUIPMENTS AND TRUCKS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00144	- SPARE PARTS FOR WATER INJECTION PUMPING UNITS	ITEMS	350	All items refer to water injection and maintenance
08-05-00145	- SPARE PARTS FOR REPAIR OF ELECTRICAL SUBMERSIBLE PUMPS.	ITEMS	40	"
08-05-00146	- SPARE PARTS FOR DRILLING AND COMPLETION FLUID MIXERS , TANKS	ITEMS	15	"
08-05-00147	- SPARE PARTS FOR ACID STORAGE PLANT AND TRAILER	ITEMS	10	"
08-05-00148	- SPARE PARTS FOR CEMENT STORAGE AND AIR COMPRESSOR AND CEMENT TRAILERS .	ITEMS	15	"
08-05-00149	- SPARE PARTS FOR PUMPING UNITS (ACIDIZING AND CEMENTING) .	ITEMS	150	"
08-05-00150	- SPARE PARTS FOR WELL HEAD GATE VALVES .	ITEMS	150	"

MINISTRY OF OIL
SHEET NO.4 OF 25
ESTABLISHMENT NAME: SOUTH OIL CO.
LOCATION : ZUBAIR, NORTH & SOUTH RUMAILA
MAINTENANCE OF PRODUCTION STATIONS (DEGASSING)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00151	- SPARE PARTS FOR INGERSOLL-RAND AIR COMPRESSORS	ITEM	112	All items this section refer to repairs and maintenance to de-gassing stations
08-05-00152	- SPARE PARTS FOR LIESTER DIESEL ENGINES	ITEM	98	"
08-05-00153	- SPARE PARTS FOR MAIN PUMPS (UCP)	ITEM	34	"
08-05-00154	- SPARE PARTS FOR AIR BLOWERS	ITEM	16	"
08-05-00155	- SPARE PARTS FOR EBARA VERTICAL PUMPS	ITEM	105	"
08-05-00156	- SALTY WATER PUMPS, WASH WATER PUMPS RECYCLE PUMPS, RECOVERED OIL VERTICAL PUMPS&SPARE PARTS	ITEM	179	"
08-05-00157	- BACKWASH PUMPS, SLUDGE PUMPS, TRANSFER PUMPS, FEED PUMPS, BOOSTER PUMPS&SPARE PARTS	ITEM	79	"
08-05-00158	- SPARE PARTS FOR WATER INJECTION MAIN PUMPS	ITEM	78	"
08-05-00159	- SPARE PARTS FOR SLOP TANK PUMPS	ITEM	17	"
08-05-00160	- SPARE PARTS FOR RUSTON GAS TURBINES TA-1750	ITEM	28	"
08-05-00161	- SKID MOUNTED AIR COMPRESSORS EACH SKID HAS TWO COMPRESSORS, AIR DRYER&AIR RECIEVER	SET	6	"
08-05-00162	- REPLACEMENT COMPLETE BOOSTER PUMPS&MAIN PUMPS FOR SHAMIAH&QURAINAT MUSHRIF	SET	7	"
08-05-00163	- CHEMICAL INJECTION PUMPS TYPE: SIMPLEX METERING P.P-8-24-156&SPARE PARTS	ITEM	57	"
08-05-00164	- SPARE PARTS FOR CLARIFIER CYCLO DRIVE	ITEM	29	"
08-05-00165	- WORTHINGTON PUMPS TYPE: 4 HNN 143, 2HNN 163, 2WX710, 2WX711&SPARE PARTS	ITEM	96	"
08-05-00166	- SPARE PARTS FOR AIR COMPRESSORS TYPE: T-40 MODEL H25	ITEM	83	"

ESTABLISHMENT NAME:SOUTH OIL CO.

LOCATION :NORTH & SOUTH RUMAILA / BASRAH
MAINTENANCE & REFURBISHMENT OF DEGASSING /
DESALTING STATIONS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00167	- CONTROL INSTRUMENT & SPARES	ITEM	170	Spare parts for degassing stations
08-05-00168	- FIELD INSTRUMENT & SPARES	ITEM	80	Spare parts for degassing stations
08-05-00169	- REPLACEMENT OF CONTROL PANEL OF RUSTON GAS TURBINES	SET	10	Spare parts for control systems for turbines

LOCATION :NORTH & SOUTH RUMAILA / GAS COMPRESSION STATIONS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00170	- TURBINE CONTROL SYSTEM & ASSOCIATED INSTRUMENTS	ITEM	30	Control systems for turbines at gas compression stations
08-05-00171	- CONTROL INSTRUMENTS & SPARES	ITEM	100	Control systems for degassing stations

LOCATION :NORTH & SOUTH RUMAILA & GARMA &
WATER INJECTION SYSTEM

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00172	- CLUSTER STATIONS CONTROL SYSTEM & ASSOCIATED INSTRUMENTS	ITEM	60	Control systems for water injection stations
08-05-00173	- FLOWMETERS & ASSOCIATED INSTRUMENTS& MONITORS	SET	75	Measurement systems for water injection stations

ESTABLISHMENT NAME: SOUTH OIL COMPANY

LOCATION : ZUBAIR / BASRAH

MAINTENANCE OF PRODUCTION STATIONS (DEGASSING)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00174	- CONTROL INSTRUMENTS & SPARES	ITEM	50	Maintenance and spares for degassing stations
08-05-00175	- FIELD INSTRUMENTS & SPARES	ITEM	150	"
08-05-00176	- CLUSTER STATIONS & SPARES	ITEM	25	"
08-05-00177	- CONTROL & MONITORING INSTRUMENTS FOR CLUSTER MANIFOLDS	SET	3	"

LOCATION :AL -BAKER TERMINAL / BASRAH

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00178	- METERING SYSTEM EQUIPMENT & SPARES	ITEM	25	Refurbishment of fiscalization metering system for crude oil exports
08-05-00179	- CONTROL EQUIPMENT & SPARES	ITEM	25	Spares for control systems for crude oil export

LOCATION :ALL DEPOT , OIL STORAGE DEPOTS, TANKS FARM & PUMP STATIONS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00180	- CONTROL INSTRUMENTS & SPARES AT PSI DEPOT	ITEM	35	Controls and instrumentation for crude oil export
08-05-00181	- FIELD INSTRUMENTS AT PSI DEPOT	ITEM	30	"
08-05-00182	- CONTROL INSTRUMENTS & SPARES AT ZR1 DEPOT	ITEM	25	"
08-05-00183	- FIELD INSTRUMENTS AT ZR1 DEPOT	ITEM	40	"
08-05-00184	- CONTROL INSTRUMENTS & SPARES AT ZR2 DEPOT	ITEM	20	"

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00185	- SPARE PARTS FOR RUSTON GAS TURBINES	ITEM	30	Electrical spare parts for degassing stations
08-05-00186	- ELECTRIC MOTOR &SPARE PARTS	ITEM	15	"
08-05-00187	- SPARE PARTS FOR NEUTRAL EARTHING TRANSFORMER	ITEM	2	"
08-05-00188	- BATTERY CHARGER& SPARE PARTS	ITEM	10	"
08-05-00189	- REPLACEMENT ELECTRIC MOTOR 269 KW	ITEM	3	"

LOCATION :NORTH & SOUTH RUMALA

(DEGASSING STATION UTILITIES)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00190	- AIR COOL- CHILLER CAP. FROM 150 TON TO 180 TON	ITEM	4	Spare parts for degassing stations
08-05-00191	- PACKAGE AIR COOLED A/C DIFFERENT CAPACITY FROM 30 TON TO 60 TON	ITEM	3	"
08-05-00192	- COMPRESSOR FOR CENTER FIUGAL 210 TON A/C UNIT	ITEM	4	"
08-05-00193	- SUBMERSIBLE PUMP FOR SEWAGE STATION DIFFERENT SIZE & CAPACITY FROM 1" TO 8"	ITEM	5	"

LOCATION :ALL DEPOTS

(OIL STORAGE DEPOTS, TANKS FARM&PUMP STATION)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00194	- SPARE PARTS FOR GEC EASI GAS TURBINES AT ZUBAIR 1	ITEM	176	Spare parts for pumping stations for crude oil exports from the South Region
08-05-00195	- SPARE PARTS FOR MAIN PUMP (UCP) AT ZUBAIR 1	ITEM	32	"
08-05-00196	- SPARE PARTS FOR BOOSTER PUMPS (RUHRPUMPEN) AT ZUBAIR 1	ITEM	31	"
08-05-00197	- TURBINE OIL AERO SHELL 390 (SPECIALISED LUB. OIL FOR R.R. TURBINES.	LITRE	25000	Specialised lubricating oil for Rolls Royce Gas Turbines
08-05-00198	- SPARE PARTS FOR A.A.F. MULTIDUTY AIR FILTERS TYPE D D PANEL	ITEM	9	Spare parts for air purification system

MINISTRY OF OIL
 ESTABLISHMENT NAME:SOUTH OIL CO.
 LOCATION :ALL DEPOTS

SHEET NO. 8 OF 25

OIL STORAGE DEPOTS, TANK FARMS & PUMP STATIONS
 ELECTRICAL MATERIALS:

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00199	- REPLACEMENT OF OLD BATTERY CELLS	SETS	6	Spare parts for gas turbines and cathodic protection
08-05-00200	- SPARE PARTS FOR CATHODIC PROTECTION STATION	ITEM	10	"
08-05-00201	- SPARE PARTS FOR ZUBAIR1 GAS TURBINE	ITEM	20	"
08-05-00202	- SPARE PARTS FOR ZUBAIR2 GAS TURBINE	ITEM	20	"
08-05-00203	- SPARE PARTS FOR ROTORK VALVE	ITEM	20	"
08-05-00204	- SPARE PARTS FOR SOLAR CATHODIC PROTECTION STATION	ITEM	15	"

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LOCATION :ALL DEPOTS
 (OIL STORAGE DEPOTS, TANKS FARM & PUMPS STATION)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00205	- CLORINATION WATER TREATMENT	ITEM	1	Drinking water for depots
08-05-00206	- BEARING DIFFERRENT SIZES	ITEM	30	Mechanical spares for pumping station workshops
08-05-00207	- SPECIAL MACHINE & EQUIPMENT FOR REWINDING MOTORS IN THE WORK SHOP	ITEM	7	Mechanical spares for pumping station workshops
08-05-00208	- CLARIFIER & FILTER FOR WATER TREATMENT CAPACITY 100 M3/HR-300M3/HR	ITEM	2	Drinking water for depots

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**OIL STORAGE DEPOTS, TANK FARMS & PUMP STATIONS
ELECTRICAL MATERIALS:**

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00209	- CRUDE OIL FLOATING ROOF STORAGE TANK COMPLETE WITH MECHANICAL, ELECTRICAL, CONTROL AND MEASURING EQUIPMENT AND ACCESSORIES, COMPLETE CONSUMABLE MATERIALS FOR ERECTION. FOR PSI TANK FARM SIZE 82000 M3.	NOS.	2	Construction of storage tanks for crude oil export
08-05-00210	- CRUDE OIL FLOATING ROOF STORAGE TANK COMPLETE WITH MECHANICAL, ELECTRICAL, CONTROL AND MEASURING EQUIPMENT AND ACCESSORIES COMPLETE CONSUMABLE MATERIALS FOR ERECTION. FOR TUBA TANK FARM SIZE 66000 M3	NOS.	4	Construction of storage tanks for crude oil export
08-05-00211	- DESLUDGING EQUIPMENT	SET	2	Construction of storage tanks for crude oil export
08-05-00212	- PORTABLE PUMPS	NOS	30	Construction of storage tanks for crude oil export
08-05-00213	- PIPE LINE COATING MATERIALS	ROLL	3000	Construction of storage tanks for crude oil export
08-05-00214	- EPOXY FOR OIL TANKS	L/TR	10000	Construction of storage tanks for crude oil export
08-05-00215	- PORTABLE WELDING MACHINES	NOS.	8	Construction of storage tanks for crude oil export
08-05-00216	- PORTABLE AIR COMPRESSORS	NOS.	4	Construction of storage tanks for crude oil export
08-05-00217	- RUBBER SEALS FOR FLOATING ROOF TANKS & SCRAPER TRAPS	SET	20	Construction of storage tanks for crude oil export

LOCATION : (OIL STORAGE DEPOTS, TANKS FARMS & PUMPS STATIONS/ MESSAN FIELDS)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00218	- OIL HEATER WITH ACCESSORIES	ITEM	2	Refurbishment of oil storage depots
08-05-00219	- SPARES FOR TURBOPUMPS	ITEM	60	Refurbishment of oil storage depots
08-05-00220	- EQUIPMENT FOR TELECOMMUNICATIONS NET WORKS	ITEM	50	Refurbishment of oil storage depots

MINISTRY OF OIL

SHEET NO: 10 OF 25

ESTABLISHMENT NAME: SOUTH OIL COMPANY

LOCATION : ALL FIELDS / BASRAH

MAINT. OF PRODUCTION STATIONS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00221	- WELL HEAD EQUIPMENT	SET	200	Maintenance and repair of production stations
08-05-00222	- VALVE AND VALVE SPARE PARTS	NOS	200	"
08-05-00223	- PIPE FITTINGS (ASSORTED CARBON STEEL)	NOS	2000	"
08-05-00224	- WELDING RODS	TON	40	"
08-05-00225	- PIPE CUTTING EQUIPMENT (COLD, HOT CUTTERS & ACCESSORIES)	SET	30	"
08-05-00226	- SHEET & METALLIC GASKETS	SET	50	"
08-05-00227	- TOOLS	SET	30	"

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LOCATION : ALL FIELDS / BASRAH

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00228	- WATER TANKS FOR FIRE FIGHTING	NOS	6	Water tank construction for firefighting

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00229	- SPARE PARTS FOR AIR COMPRESSORS TYPE ORIGIN	ITEM	62	Spares and maintenance for gas compressor stations
08-05-00230	- SPARE PARTS FOR SOLAR GAS TURBINES&GAS COMPRESSORS	ITEM	107	"
08-05-00231	- INGERSOLL-RAND PNEUMATIC MOTORS & SPARE PARTS	ITEM	36	"
08-05-00232	- AIR FILTERS FOR SOLAR GAS TURBINES	ITEM	2	"
08-05-00233	- HIGH PRESSURE CONDENSATE PUMPS & SPARE PARTS	ITEM	51	"
08-05-00234	- OIL ENTRAINMENT PUMPS , SLOP TANK PUMPS & SPARE PARTS	ITEM	38	"
08-05-00235	- SPARE PARTS FOR INGERSOLL-RAND AIR COMPRESSORS TYPE :10 T	ITEM	27	"
08-05-00236	- SPARE PARTS FOR HITACHI GAS COMPRESSORS	ITEM	40	"
08-05-00237	- SPARE PARTS FOR GAS COOLERS	ITEM	80	"
08-05-00238	- SPARE PARTS FOR FLOW TANK BLOWERS & BOOSTER BLOWERS	ITEM	60	"
08-05-00239	- REPLACEMENT EMERGENCY SHUT - OFF VALVES FOR FIRST STAGE GAS, COMPLETE WITH RECOMMENDED SPARE PARTS	SET	5	"
08-05-00240	- PORTABLE VIBRATION ANALYZER COMPLETE WITH ALL ACCESSORIES	SET	3	"
08-05-00241	- SPARE PARTS FOR GLYCOL REGENERATORS	NO	40	"

LOCATION :NORTH & SOUTH RUMAILA :(GAS COMPRESSION STATION)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00242	- COMPRESSORS 7.5 TON, 10 TON, 15 TON	ITEM	15	Equipment and spares for gas compressor stations
08-05-00243	- WATER PUMP FOR CHILLERS (60-80) M3/H & HEAD(40-60) METER	ITEM	2	"
08-05-00244	- WINDING WIRE DIFFERENT GAUGES & CLASSES & INSULATION PAPER	ITEM	20	"
08-05-00245	- TRANSFORMER (COMPLETE)FROM 250 KVA TO 1000 KVA	ITEM	2	"
08-05-00246	- UNIT SUBSTATION FOR DIFFERENT CAP. 11KV-400 V	ITEM	2	"
08-05-00247	- CABLE JOINT DIFFERENT SIZES	ITEM	3	"
08-05-00248	- END BOX HIGH VOLTAGE DIFFERENT SIZES	ITEM	3	"

LOCATION : NORTH & SOUTH RUMAILA / BASRAH
GAS COMPRESSION AND DEGASSING STATIONS
ELECTRICAL MATERIALS:

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00249	- CIRCUIT BREAKER, CONTACTOR & SPARE PARTS	ITEM	40	Electrical spare parts for gas compression and degassing stations
08-05-00250	- U.P.S. UNIT & SPARE PARTS	ITEM	10	"
08-05-00251	- CABLE JOINT S.H.T & LT	ITEM	25	"
08-05-00252	- LAMPS (HIGH PRESSURE SODIUM)	NO	1000	"
08-05-00253	- LOW & HIGH VOLTAGE CABLES	ITEM	25	"
08-05-00254	- SPARE PARTS FOR DIESEL ENGINE	ITEM	10	"
08-05-00255	- SPARE PARTS FOR MOTOR	ITEM	20	"

LOCATION : NORTH & SOUTH RUMAILA / BASRAH
MAINTENANCE OF COMPRESSION STATIONS
ELECTRICAL MATERIALS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00256	- REPLACEMENT ELECTRIC MOTOR 1900 KW 6.6 KV	ITEM	2	Electrical spare parts for gas compression stations
08-05-00257	- SPARE PARTS OF ELECTRIC VALVES	ITEM	15	Electrical spare parts for gas compression stations
08-05-00258	- ELECTRIC MOTORS & SPARE PARTS	ITEM	25	Electrical spare parts for gas compression stations

LOCATION : ALL FIELDS / BASRAH
PRODUCTION CHEMICALS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00259	- ZINC SULPHATE (ZNSO4.7H2O) FOR WATER INJECTION	TON	300	Chemicals for water injection plants
08-05-00260	- POLY ACRYL AMIDE FOR WATER INJECTION	TON	24	Chemicals for water injection plants
08-05-00261	- LAB. CHEMICAL	ITEM	30	Chemicals for analytical purposes
08-05-00262	- LAB APPARATUS	NOS	15	Apparatus for analytical purposes

MINISTRY OF OIL

SHEET NO:13 OF 25

ESTABLISHMENT NAME: SOUTH OIL COMPANY
 LOCATION :ALL FIELDS/BASRAH

FIRE FIGHTING & SAFETY EQUIPMENTS & MATERIALS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00263	- FIRE FIGHTING TRUCKS	NOS	3	Fire fighting equipment
08-05-00264	- FIRE FIGHTING EQUIPMENTS	NOS	400	"
08-05-00265	- FIRE EXTINGUISHERS	NOS	100	"
08-05-00266	- FOAM PROPORTIONATING BLADDERS	NOS	12	"
08-05-00267	- BALL VALVES FOR FOAM SYSTEM	NOS	50	"
08-05-00268	- BREATHING AIR CHARGING UNIT	NOS	2	"
08-05-00269	- PERSONNAL SAFETY EQUIPMENTS	NOS	355	"

LOCATION :ALL SITES HEAVY TRUCKS & EQUIPMENT

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00270	- CRANE 80-100 TON 8-CYL INDER DIESEL L.H.D.	NOS	2	Equipment and Spare parts for heavy engineering
08-05-00271	- CRANE 30 TON 4- WHEEL DRIVE, 4- WHEEL STEERING	NOS	3	"
08-05-00272	- FORK LIFT 3 TON 4 CYL. WITH RECOMMENDED SPARE PARTS	NOS	8	"
08-05-00273	- FORK BARELL LIFT 2 TON WITH RECOMMENDED SPARE PARTS	NOS	4	"
08-05-00274	- SPARE PARTS FOR HEAVY EQUIPMENT	ITEM	300	"
08-05-00275	- SPARE PARTS FOR LIGHT EQUIPMENT	ITEM	300	"
08-05-00276	- WORK SHOP EQUIPMENT	ITEM	40	"
08-05-00277	- SPECIALISED SERVICE TRUCKS FOR OIL FIELD OPERATIONS	NO	10	"

LOCATION :SOUTH RUMAILA / GARMA WATER INJECTION SYSTEM
ELECTRICAL MATERIALS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00278	-REPLACEMENT ELECTRIC MOTORS	ITEM	5	Electrical equipment for water injection systems
08-05-00279	- SPARE PARTS FOR EXCITER	ITEM	30	"
08-05-00280	- REPLACEMENT ELECTRIC MOTOR 2500 KW	ITEM	3	"

LOCATION : RUMAILA - HADITHA PIPE LINE & STATIONS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00281	- SPARE PARTS FOR OIL MAIN PUMPS & G.E GAS TURBINE	SET	6	Spare parts for pumping stations
08-05-00282	- SPARES PARTS FOR COMMUNICATION SYSTEM	SET	15	"

LOCATION : REPAIR OF DEEP SEA TERMINALS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00283	- ELECTRICAL INSTALLATIONS: MCC, SWITCH GEAR, ACCESSORIES	ITEM	20	Spare parts for al-Amayah loading terminal
08-05-00284	- MECHANICAL EQUIPMENTS: PUMPS, VALVES, GENERATORS, ACC. TELESCOPIC GANGWAY COMPLETE WITH ALL ACCESSORIES	ITEM	40	"
08-05-00285	- EQUIPMENT FOR REPAIR & COMPLETION OF EMCOWHEATON LOADING ARMS	ITEM	70	"
08-05-00286	- CONTROL INSTRUMENTS	ITEM	36	"
08-05-00287	- MISC. FITTINGS AND ACCESSORIES.	ITEM	100	"

LOCATION : AL BAKER TERMINAL

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00288	- SPARES FOR SEA CHANNEL DREDGERS	ITEM	100	Spare parts for Mina al-Bakr loading terminal
08-05-00289	- MOORING BOAT WITH SPARES & ACCESSORIES	NO.	4	"
08-05-00290	- MEASUREMENT INSTRUMENTS FOR ENVIRONMENT PROTECTION	ITEM	25	"

MINISTRY OF OIL

SHEET NO. 15 OF 25

LOCATION : AL - BAKER TERMINAL / BASRAH
ELECTRICAL MATERIALS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00291	- SPARE PARTS FOR LOADING ARMS	ITEM	30	Spare parts for Mina al-Bakr loading terminal
08-05-00292	- SPARES PARTS FOR M.V. SWITCH GEAR STATION	ITEM	20	Spare parts for Mina al-Bakr loading terminal

LOCATION : BASRAH
(AL BAKER TERMINAL)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00293	- SPLIT AIR CONDITION 1.5 TON	ITEM	1	Spare parts for Mina al-Bakr loading terminal
08-05-00294	- SPLIT AIR CONDITION 2 TON	ITEM	1	Spare parts for Mina al-Bakr loading terminal

LOCATION : (AL BAKER TERMINAL)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00295	- SPARE PARTS FOR CATERPILLAR DIESEL ENGINES	ITEM	150	Spare parts for Mina al-Bakr loading terminal
08-05-00296	- SPARE PARTS FOR PEERLESS FIRE FIGHTING PUMPS	ITEM	40	"
08-05-00297	- SPARE PARTS FOR CAPSTANS	ITEM	16	"
08-05-00298	- SPARE PARTS FOR SLOP TANK&SURGE TANK MIXERS	ITEM	47	"

MINISTRY OF OIL

ESTABLISHMENT NAME: SOUTH OIL COMPANY

SHEET NO:16 OF 25

LOCATION :NORTH & SOUTH RUMAILA FIELD ZUBAIR BAB-AL
ZUBAIR CENTER

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00299	- TELECOMMUNICATION SYSTEM & EQUIPMENT TO REPLACES DAMAGED OR OBSOLETE SYSTEMS	ITEM	70	Replacement telecommunications system for South Area

LOCATION :ALL FIELDS
SERVICE CONTRACTS.

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00300	- COILED TUBING SERVICES FOR WORKOVER AND STIMULATION			Service contract for production well workovers
08-05-00301	- OPEN AND CASED HOLES LOGGING SERVICES.			Service contract for production well workovers
08-05-00302	- REPAIR OF DAMAGED COILED TUBING UNIT			Spare parts for well workover equipment

LOCATION :SERVICE CONTRACTS/BASRAH

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00303	-CONTRACT FOR CUSTODY METER CERTIFICATION		1	Service contract for meter proving at Mina al-Bakr terminal

MINISTRY OF OIL

SHEET NO:17 OF 25

ESTABLISHMENT NAME: SOUTH OIL COMPANY

LOCATION : ZUBAIR, NORTH & SOUTH RUMAILA
SERVICE CONTRACTS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00304	- TO OVERHAUL 2 NOS. ROLLS ROYCE AVON 1533/75 G AT ZUBAIR I (ABROAD)			Continuation of overseas overhauls commenced in Phase 4
08-05-00305	- TO OVERHAUL 2 NOS. ROLLS ROYCE AVON 1534/101G AT PSI (ABROAD)			Continuation of overseas overhauls commenced in Phase 4
08-05-00306	- TO REFURBISH ROTORS & STATORS FOR RUSTON TA-1750 GAS TURBINE (4) NOS. (ABROAD)			Continuation of overseas overhauls commenced in Phase 4

LOCATION : ALL FIELD (RUMAILA, ZUBAIR, MISSAN)
MATERIAL AND EQUIPMENT FOR OIL FLOW LINE

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00307	- LINE PIPES 6 DIAMETER POLY PROPYLENE COATED WITH SUITABLE SHRINKABLE SLEEVES ACCORDING TO API-5LX	KM	150	Repairs to flow line production systems
08-05-00308	- LINE PIPE 8 DIAMETER POLY PROPYLENE COATED WITH SUITABLE SHRINKABLE SLEEVES ACCORDING TO API-5LX	KM	100	"
08-05-00309	- VALVES CLASS 900 AND FLANGES	NO	800	"
08-05-00310	- FITTING (ELBOWS, TEES , COUPLING)	NO	400	"
08-05-00311	- PRESSURE AND TEMPRETURE GAUGES AND VALVES	NO	150	"
08-05-00312	- WELDING RODS	TON	10	"
08-05-00313	- GRINDING WHEELS	NO	1000	"
08-05-00314	- WELDING SETS AND HANDLLING EQUIPMENT	SET	6	"
08-05-00315	- SERVEYING EQUIPMENTS AND ACCESSORIES	SET	10	"
08-05-00316	- XRAY FILMS AND SOLUTION	LOT	10	"

MINISTRY OF OIL

ESTABLISHMENT NAME: SOUTH OIL COMPANY

LOCATION : WEST QURNA DG 8

SHEET NO. 18 OF 25

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00317	<p>PRODUCTION BANK CONSISTS OF THREE GAS/OIL SEPARATION STAGES OF 40000 BID CAPACITY COMPLETE WITH ALL COMPLEMENTARY SYSTEMS INCLUDING: INSTRUMENTATION AND CONTROL SYSTEM, INTERCONNECTION PIPING AND VALVE, FITTING SYSTEM, FIRE FIGHTING SYSTEM, PUMPING & MANIFOLDS</p> <p>- OIL FLOW LINES</p>	SET	12	Gas/Oil separation units to increase production at DG-8
08-05-00318	- OIL FLOW LINES	KM	60	"
08-05-00319	<p>DEHYDRATION / DESALTING UNITS FOR HEAVY CRUDE OIL TREATMENT OF 40000 B/D DRY CRUDE CAPACITY INCLUDING:</p> <p>DEHYDRATION DESALTER, ELECTROSTATIC VESSELS, SETTLERS, DEGASSERS COMPLETE WITH INTERNAL AND EXTERNAL ACCESSORIES, PUMPS SKIDS FOR FRESH WATER, RECYCLE WATER, EFFLUENT WATER COMPLETE PACKAGE OF INSTRUMENTATION AND CONTROL SYSTEM</p> <p>- COMPLETE ELECTRICAL SYSTEM/ INTER CONNECTING PIPING AND FITTINGS/ SPARE PARTS FOR TWO YEARS</p>	UNIT	2	Dehydration and desalting units to increase production
08-05-00320	- COMPLETE ELECTRICAL FEEDING AND DISTRIBUTION SYSTEM INCLUDING CONDUCTORS AND TOWERS, TRANSFORMERS, SWITCH GEARS MCCS, BATTERY CHARGER CABLINGS AND ALL ACCESSORIES	SET	1	Related equipment to above project
08-05-00321	- SERVICE AND HANDLING EQUIPMENTS	SET	5	"
08-05-00322	- GLYCOL REGENERATION UNIT COMPLETE WITH PUMPS INSTRUMENTS CONTROLS, ELECTRICAL, VALVES, FITTINGS & ACCESSORIES	UNIT	2	"
08-05-00323	- EMERGENCY DIESEL GENERATORS	SET	2	"

MISTRY OF OIL

ESTABLISHMENT NAME:SOUTH OIL COMPANY

LOCATION :WEST QURNA DG 7

SHEET NO:19 OF 25

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00324	<p><u>CRUDE OIL SURFACE FACILITIES AND COMPLEMENTARY SYSTEM FOR PRODUCTION INCLUDING :</u></p> <p>- OIL PRODUCTION BANK OF 40000 B/D CAPACITY OF THREE GAS/OIL SEPARATION STAGES.</p> <p>COMPLETE WITH ALL COMPLEMENTARY SYSTEM AND ACCESSORIES WHICH CONSIST OF PRODUCTION SEPARATORS, INSTRUMENTATION AND CONTROL SYSTEM, INTERCONNECTION PIPING,... ETC.</p>	SET	30	Gas/Oil separation units to increase production at DG-7
08-05-00325	<p>- COMPLEMENTARY EQUIPMENT AND DEVICES FOR FLOW TANKS, PUMPING STATION, FIRE FIGHTING SYSTEM, TELECOMMUNICATION SYSTEM, INSTRUMENT AIR SYSTEM, AND FLOW LINE FOR PRODUCTION WELL AND FIELD MANIFOLD SYSTEM INCLUDING PIPING AND FITTING</p>	SET	6	Associated equipment required for completion of above project
08-05-00326	<p>- COMPLETE ELECTRICAL FEEDING SYSTEM INCLUDING COPPER OR ALUMINUM CONDUCTORS, TOWERS AND INSULATORS, TRANSFORMERS, SWITCH GEARS, PMCCS, CABELLINGS AND ALL ACCESSORIES</p>	SET	3	"
08-05-00327	<p>- SERVICES AND HANDLING EQUIPMENT</p>	SET	4	"
08-05-00328	<p>- GLYCOL REGENERATION UNIT COMPLETE WITH PUMPS INSTRUMENTS CONTROLS, ELECTRICALS, VALVES, FITTINGS & ACCESSORIES</p>	UNIT	2	"
08-05-00329	<p>- EMERGENCY DIESEL GENERATORS</p>	SET	2	"

MINISTRY OF OIL

ESTABLISHMENT NAME: SOUTH OIL COMPANY
LOCATION : WEST QURNA

SHEET NO:20 OF 25

**DEVELOPMENT OF WEST QURNA OIL FIELD FOR
 EARLY PRODUCTION OF DEGASSING STATION NO . 6**

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00330	- COMPLETE PACKAGES OF DEGASSING STATION PUMPING ABD TRANSPORTATION FACILITIES OF DGS 6 IN WEST QURNA OIL FIELD INCLUDING DEGASSING BANK OF 60000 B/D CAPACITY WITH ALL NECESSARY COMPLEMENTARY SYSTEMS, COMPLETE ELECTRICAL FEEDING AND DISTRIBUTION SYSTEMS, FLOW	set	1	Degassing equipment for DG-6 to increase production

LOCATION :FIRST STRATEGIC TRANSPORTATION PIPE LINE
MATERIALS FOR REFERFISHMENT OF DAMAGED SECTIONS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00331	- COATED PIPE LINES OF 42" DIAMETER COMPLETE WITH SHRINKABLE SLEEVES ACCORDING TO API 5 LX	METER	2000	Repairs to Strategic Pipeline to allow export of oil from South to North via Kirkuk
08-05-00332	- WELDING RODS,AND CONSUMABLES	TON	4	"
08-05-00333	- COAL TAR AND PRIMER	M3	1000	"
08-05-00334	- PVC TAPES	M2	2000	"
08-05-00335	- SERVICE AND HANDLING EQUIPMENT.	SET	8	"
08-05-00336	- GRINDING WHEEL	NO	2000	"

MINISTRY OF OIL

ESTABLISHMENT NAME: SOUTH OIL COMPANY

LOCATION :GARMAT ALLI

SHEET NO:21 OF 25

SEPARATE SYSTEM FOR INDUSTRIAL WATER FACILITIES
AT GARMAT ALLI WATER INJECTION PURIFICATION-SITE

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00337	INDUSTRIAL WATER FILTRATION AND PUMPING STATION FOR OIL FIELD UTILIZATION (WET CRUDE OIL DEHY/DESAL UNIT . FIRE FIGHTING SYSTEM AND DOMESTIC SERVICE, THE SYSTEM INCLUDES COMPLETE SET OF PUMPING STATION OF DISCHARGE CAPACITY OF 2400 M/HR AND BANKS OF WATER FILTERS COMPLETE WITH ALL ELECTRICAL SYSTEM, INSTRUMENTATION AND CONTROL, INTERCONNECTING PIPING WITH VALVES AND FITTING WITH ALL NECESSARY ACCESSORIES.	SET	10	Water injection system purification site equipment

MINISTRY OF OIL
 ESTABLISHMENT NAME: SOUTH OIL COMPANY
 LOCATION :SOUTH RUMAILA

SHEET NO:22 OF 25

WATER INJECTION REFRISHMENT OF ELECTRICAL AND
 CONTROL SYSTEM OF CLUSTER PUMPING STATION (CPS 10)

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00338	- ELECTRICAL & INSTRUMENT MATERIALS TO REPLACE DAMAGED & MISSING ITEMS OF CLUSTER PUMPING STATION AT SOUTH RUMAILA OIL FIELD INCLUDING : - ELECTRICAL MEDIUM VOLTAGE SWITCHGEAR BOARD COMPLETE WITH PROTECTION	SET	5	"
08-05-00339	- LOW VOLTAGE SWITCHGEAR BOARD COMPLETE WITH PROTECTION	SET	5	"
08-05-00340	- POWER MOTOR CONTROL CENTER (PMCC)	SET	2	"
08-05-00341	- TRANSFORMERS (POWER + ZIG-ZAG)	NO	8	"
08-05-00342	- THYRISTOR EXCITER PANELS	NO	480	"
08-05-00343	- BATTERY CHARGER (220 VOLT, 110 VOLT, 24VOLT)	NO	8	"
08-05-00344	- SETS OF PROTECTION BATTERIES	SET	4	"
08-05-00345	- LOCAL CONTROL BOARDS	SET	4	"
08-05-00346	- MOTORIZED VALVES & ACTUATORS	SET	8	"
08-05-00347	- CABLES WITH ALL NECESSARY ACCESORIES	METER	8000	"
08-05-00348	- PROTECTIVE RELAYS FOR MODIFICATION OF 132 KV CONTROL PANEL	SET	8	"
08-05-00349	- AIR CONDITIONING UNIT (10 TONS)	NO	2	"
08-05-00350	- RECOMMENDED SPARE PARTS	SET	8	"
08-05-00351	- COMPLETE PACKAGE OF CONTROL & INSTRUMENT SYSTEM WITH ACCESSORIES	SET	2	"

MINISTRY OF OIL
 ESTABLISHMENT NAME: SOUTH OIL CO.
 SHEET NO. 23 OF 25
 LOCATION : ZUBAIR MISHRIF/ ZUBAIR OIL FIELD/ZUBAIR MISHRIF
 DEGASSING ST./HAMMAR MISHRIF DEGASSING ST./WET
 CRUDE OIL TREATMENT FACILITIES

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00352	<p>DEHYDRATION/DESALTING UNITS WITH COMPLEMENTRY SYSTEM FOR ZUBAIR MISHRIF AND HAMMAR MISHRIF DEGASSING STATIONS OF 40000 B/DAY DRY CRUDE EACH INCLUDING:</p> <ul style="list-style-type: none"> - DESIGN AND DETAILED ENGINEERING DRAWING. - PROCUREMENT OF EQUIPMENT AND MATERIALS, DELIVERY OF EQUIPMENTS AND MATERIAL CIF UM QASSER. SUPERVISION OF INSTALLATION AND TECHNICAL ASSISTANCE DURING FIELD CONSTRUCTION. - ERECTION, TESTING AND COMMISSIONING, EACH UNIT INCLUDES THE FOLLOWING. - ELECTROSTATIC DEHY/DESALTER VESSELS WITH CORRESPONDING DEGASSERS COMPLETE WITH INTERNAL AND EXTERNAL ASSEMBLIES. - PUMP SKIDS FOR WASH WATER, RECYCLE WATER, EFFLUENT WATER, DEOILED WATER COMPLETE WITH INTER CONNECTING PIPING. - CHEMICAL INJECTION PUMPING PACKAGES FOR, DEMULSIFIER, DESCALER AND CORROSION INHIBITOR. - EFFLUENT WATER TREATMENT UNIT COMPLETE WITH INTERNAL ASSEMBLY. - COMPLETE PACKAGE INSTRUMENTATION WITH CONTROL SYSTEM BOTH LOCAL AND REMOTE (CONTROL ROOM .PANEL). - ELECTRICAL SYSTEM INCLUDING POWER GRID TRANSFORMERS, CABLING, PMCCS,LIGHTING AND ACCESSORIES. - INTER CONNECTING PIPING SYSTEM WITH ALL NECESSARY VALVES AND FITTING WITH CONSUMABLE MATERIALS. - ALL AUXILIARY SYSTEM (RELIEF,DRAIN,ASSOCIATED GAS, MIXING DEVICES) - RECOMMENDED SPARE PARTS FOR TWO YEARS OF OPERATION 	UNIT	4	Equipment and spare parts for production water removal, to boost production

LOCATION : FLOW AND BAD OIL TANKS FOR SOUTH RUMAILA
OIL FIELD DEGASSING STATIONS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00353	<p>FLOW TANKS 5000 M³ CAPACITY FOR SHAMIYA AND QURAINAT MISHRIF DEGASSING STATION COMPLETE WITH ALL INTERNAL AND EXTERNAL ACCESSORIES. THE TANKS SHALL INCLUDE:</p> <ul style="list-style-type: none"> - INLET, OUTLET, RECYCLE, DRAIN NOZZLES WITH SUITABLE MOTORIZED VALVES AND FITTING. - COMPLETE PACKAGE OF INSTRUMENTATION AND CONTROL SYSTEM WITH ALL ACCESSORIES CABLING...ETC - COMPLETE ARRESTOR, EARTHING AND LIGHTING SYSTEM. - FIRE FIGHTING SENSING AND ACTUATING SYSTEM WITH COOLING WATER AND FOAM SYSTEM. - INTER CONNECTING PIPING, VALVES AND FITTING. - INTERNAL E-POXY COATING AND OUTSIDE PAINTING. - ALL CONSUMABLES REQUIRED FOR LOCAL CONSTRUCTION OF THE TANKS WITH WELDING SETS. 	NOS.	2	Equipment to construct flow tanks, bad oil tanks (slops) and associated equipment for the movement, storage and pumping of same
08-05-00354	<p>BAD OIL TANK FOR TEMPORARY BAD CRUDE OIL STORAGE IN CASE OF BAD OPERATION OF DEHYDRATION/DESALTING UNITS. 700 M WITH ALL INTERNAL AND EXTERNAL ACCESSORIES. TO BE INSTALLED IN JANUBIA. RUMAILA, RATGA, QURAINAT AND SHAMIYA DEGASSING STATIONS</p> <ul style="list-style-type: none"> - EACH TANK SHALL BE EQUIPED WITH PUMPING GRID FOR REPUMPING THE BAD OIL BACK TO THE INLET OF EXISTING DEHY/DESALTING UNITS. WITH ALL NECESSARY INTERCONNECTING PIPING AND MOTORIZED VALVES...ETC 	NOS.	6	

MINISTRY OF OIL
ESTABLISHMENT NAME: SOUTH OIL COMPANY
SHEET NO:25 OF 25
LOCATION :NORTH RUMAILA/ ADDITIONAL DEVELOPMENT OF NORTH
RUMAILA OIL FIELD ACCELERATER PHASE - WATER
INJECTION SYSTEM

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00355	<p>- COMPLETE FILTRATION AND DISTRIBUTION PIPING ARRANGEMENT FOR WATER INJECTION DESCRIBED IN THREE CLUSTER PUMPING STATION EACH FILTRATION SET HAVING 750 MHR WATER CAPACITY AND CONSISTS OF:</p> <p>FILTRATION SYSTEM</p> <p>-THREE SKID MOUNTED PRESSURIZED MULTI-MEDIA FILTER VESSELS EACH OF 250 MHR WITH WATER OUTLET PARTICLE SIZE OF NOT MORE THAN (4) MICRONS</p> <p>- INTER CONNECTING PIPING WITH VALVES AND FITTINGS .</p> <p>- BACK WASHING SYSTEM COMPLETE WITH COMPRESSED AIR SYSTEM, PUMPS SKIDS, VALVES AND FITTINGS.</p> <p>- COMPLETE PACKAGES OF INSTRUMENTATION AND CONTROL SYSTEM WITH REMOTE CONTROL PANEL.</p>	SET	3	“
08-05-00356	<p>WATER INJECTION MANIFOLD CONSISTING OF :</p> <p>- WATER INJECTION HEADER WITH DESIGN PRESSURE OF 210 KG/CM² AND INCLUDING (14) BRANCH OUTLETS OF 6” DIA. COMPLETE WITH ALL NECESSARY VALVES AND FITTINGS.FLOWMETERS,PRESSURE AND TEMPERATURE INDICATORS AND CONTROL SYSTEM.</p> <p>- OIL PRODUCTION HEADER WITH DESIGN PRESSURE OF 150 KG/GM AND CONSISTS OF (14) BRANCH OUTLETS OF 6” DIAMETER COMPLETE WITH ALL NECESSARY VALVES AND FITTING FOR OIL PRODUCTION OF INJECTION WELLS PRIOR TO WATER INJECTION.</p>	SET	3	“
08-05-00357	<p>- INTER CONNECTING PIPING SYSTEM BETWEEN THE EXISTING PUMPING STATION AND THE PROPOSED FILTRATION AND MANIFOLD SYSTEM COMPLETE WITH MOTORIZED VALVES PIPES&FITTINGS.</p>	SET	3	“
08-05-00358	<p>- FLOW LINE PIPES OF 6”-4” DIAMETER, PVC OUT SIDE COATED WITH SUITABLE SHRICKABLE SLEEVES</p>	KM	150	“
08-05-00359	<p>- VALVES CLASS 1500 AND 900, FLANGES, GASKETS, ELBOWS, TEES, STUD BOLTS, AND ANY OTHER NECESSARY FITTINGS.</p>	LOT	LOT	“

MINISTRY OF OIL

ESTABLISHMENT NAME: IRAQ DRILLING CO.

LOCATION : BASRAH AND KIRKUK

SHEET NO: 1 OF 2

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00360	- SPARES FOR (SIX) OIL WELL RIGS	NOS.	20 000	Spares for 20 drilling and workover rigs in both North and South regions
08-05-00361	- SPARES FOR (ONE) C.131 RIG	.NOS	4 000	"
08-05-00362	- SPARES FOR (THREE) EMSCO RIG	NOS.	5 000	"
08-05-00363	- SPARES FOR (TWO) P80 RIGS	.NOS	2 000	"
08-05-00364	- SPARES FOR (SIX) IDECO RIGS	NOS.	8 000	"
08-05-00365	- SPARES FOR (ONE) CARRIER RIGS	.NOS	1 000	"
08-05-00366	- SPARES FOR (ONE) CABOT RIG	NOS.	5 000	"

MINISTRY OF OIL
 ESTABLISHMENT NAME:IRAQ DRILLING CO.
 LOCATION :BASRAH AND KIRKUK

SHEET NO: 2 OF 2

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00367	- AMBULANCE	NOS.	8	Spares, equipment and safety items related to drilling 20 new wells in previous section
08-05-00368	- LOW LOADERS 50 TONS	.NOS	8	"
08-05-00369	- CRANES 20 TONS	NOS.	6	"
08-05-00370	- FORKLIFTS 5 TONS	.NOS	2	"
08-05-00371	- MOBILE WORKSHOP	NOS.	2	"
08-05-00372	- WELDING MACHINE	.NOS	6	"
08-05-00373	- TYRES & TUBES FOR HEAVY LOADERS	NOS.	600	"
08-05-00374	- AIR COMPRESSORS	.NOS	10	"
08-05-00375	- MUD PUMPS	NOS.	6	"
08-05-00376	- ENGINES FOR HEAVY VEHICLES	.NOS	20	"
08-05-00377	- SPARES FOR HEAVY VEHICLES	NOS.	5 000	"
08-05-00378	- DRILL PIPE & DRILL COLLARS	.NOS	1 000	"
08-05-00379	- HAND TOOLS & WORKSHOP EQUIPMENT	NOS.	1 000	"
08-05-00380	- SAFETY & FIRE EQUIPMENT	.NOS	6 000	"
08-05-00381	- DRILLING CAMPS FOR 80 PERSONS	NOS.	2	"
08-05-00382	- LABORATORIES FOR MUD QUALITY CONTROL	.NOS	2	"
08-05-00383	- COMMUNICATION RADIO LINK BETWEEN SITES & BASE	LINK	1	"

MINISTRY OF OIL
SHEET NO. 1 OF 12
ESTABLISHMENT NAME : OIL PROJECTS COMPANY (SCOP)
LOCATION : ALL SITES

**INSPECTION EQUIPMENTS, MATERIALS &
 TOOLS.**

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00384	- X-RAY EQUIPMENT	SET	2	Non destructive testing equipment and materials
08-05-00385	- ACCESSORIES OF RADIOGRAPHIC INSPECTION OF WELDED JOINTS (FILMS, CHEMICALS, SAFETY EQUIPMENT)	ITEM.	20	"
08-05-00386	- ULTRASONIC THICKNESS METER FLOW DETECTOR WITH PROBES, TEST BLOCK AND OTHER ACCESSORIES	ITEM.	4	"
08-05-00387	- DYE PENETRATION MATERIALS	SET.	100	"
08-05-00388	- COATING & PAINT INSPECTION UNITS (HOLIDAY DETECTOR & THICKNESS GAUGE)	ITEM.	3	"
08-05-00389	- PORTABLE HARDNESS TESTER	NO.	1	"
08-05-00390	- WELD SEAM VACUUM TEST DEVICE	NO.	10	"
08-05-00391	- ISOTOPE SOURCES .IR 192 (40-100) CURIES.	NO.	4	"

MINISTRY OF OIL

SHEET NO. 2 OF 12

ESTABLISHMENT NAME : OIL PROJECTS COMPANY (SCOP)

LOCATION : ENGINEERING OFFICES

DESIGN OFFICE REQUIREMENTS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00392	- LATEST ENGINEERING STANDARDS ON C.D. ROMS (API,ASTM,ASME,ANSI,NFPA , ACl, IBC, ASHRE,AASHO,AWWA,CCITT, ETC).	SET.	2	Office equipment, software for quality control
08-05-00393	- ENGINEERING DESIGN SOFTWARE (PROCESS, EQUIPMENT,PIPING, INSTRUMENTATION, ELECTRICAL,CIVIL WORK & ARCHIVE SOFTWARE).	SET.	1	"
08-05-00394	- PROJECT MANAGEMENT SOFTWARE (COSTING,SCHEDULING,QUALITY, ENVIRONMENTAL & CONTRACT)	SET	1	"
08-05-00395	- PHOTOCOPYING MACHINE FOR DRAWING UP TO (A0) SIZE	NO.	1	"

MINISTRY OF OIL
SHEET NO. 3 OF 12
ESTABLISHMENT NAME : OIL PROJECTS COMPANY (SCOP)
LOCATION : ENGINEERING OFFICES
DESIGN OFFICE REQUIREMENTS

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00396	- SCANNER SIZE (A0) COMPATIBLE TO PC . RESOLUTION MIN. 600X600 AND RESTER TO VECTOR SOFTWARE .	NO.	1	Office equipment, for quality control
08-05-00397	- PORTABLE TEST EQUIPMENT AND INSTRUMENTS (AVOS, CLAMP AMMETERS , AIR FLOW METERS, VIBRATION METERS, EARTH RESISTANCE METER , ETC.)	NO.	10	Electrical testing equipment
08-05-00398	- MULTI FUNCTION TEST INSTRUMENT FOR CATHODIC PROTECTION SYSTEM.	NO.	1	Electrical testing equipment

ESTABLISHMENT NAME : OIL PROJECTS COMPANY (SCOP)

LOCATION : BAGHDAD WORK SHOP FABRICATION AND
MAINTENANCE SHOP FOR OIL STORAGE
TANKS AND HEAT EXCHANGERS

CODE	ITEM DESCRIPTION	UNIT	QTY.	COMMENT
08-05-00399	- PORTABLE FLAME CUTTING MACHINE COMPLETE WITH RAILS 4 METER LENGTH	SET.	4	Cutting and plate treatment equipment for workshops
08-05-00400	- ELECTRICAL SECTION BENDING MACHINE UP TO 200 mm SECTION	NO.	1	"
08-05-00401	- HYDRAULIC SHEET-CUTTING MACHINE 25 mm x 3000 mm	NO.	1	"
08-05-00402	- HYDRAULIC SHEET-BENDING MACHINE 25mm x 3000 mm	NO.	1	"
08-05-00403	- FOUR-CYLINDER PLATE ROLLING MACHINE WITH AUTOMATIC CONTROL SYSTEM 25 mm x 3000 mm.	NO.	1	"
08-05-00404	- HYDRAULIC TUBE BENDING MACHINE 42 mm x 4 mm	NO.	1	"
08-05-00405	- HYDRAULIC TUBE BENDING MACHINE 60 mm x 5 mm	NO.	1	"
08-05-00406	- ELECTRICAL HYDRAULIC PIPE BENDING MACHINE UP TO 165 mm x 12 mm	NO.	1	"
08-05-00407	AUTOMATIC MACHINE FOR SHEET CUTTING (OXYGEN + LPG) WITH FIVE TORCHES BED DIMENSION 3000mm x 10000mm TO CUT UP TO 125mm THICKNESS.	NO.	1	"

MINISTRY OF OIL
SHEET NO. 5 OF 12
ESTABLISHMENT NAME : OIL PROJECTS COMPANY (SCOP)
LOCATION : BAGHDAD WORK SHOP
FABRICATION AND MAINTENANCE SHOP FOR
OIL STORAGE TANKS AND HEAT EXCHANGERS

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CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00408	- COLUMN AND BOOM TYPE SUBMERGED ARC WELDING MACHINE (BOOM LENGTH 5m) RATED INPUT POWER 1000 KVA	NO.	2	General workshop equipment
08-05-00409	- AUTOMATIC SHEET DRILLING MACHINE TABLE DIMENSION 1500MM x 1500MM	NO.	1	"
08-05-00410	- ELECTRICAL HORIZONTAL BAND SAW 2000mm x 2000mm	NO.	1	"
08-05-00411	- ELECTRICAL TUBE EXPANDING MACHINE 42 mm	NO.	2	"
08-05-00412	- ELECTRICAL TUBE EXPANDING MACHINE 60 mm	NO.	2	"
08-05-00413	- AUTOMATIC TUBE - TUBE SHEET WELDING MACHINE .40 TO 60 mm DIA.	NO.	1	"
08-05-00414	- SPARE PARTS FOR ALL ABOVE MACHINES .	ITEM.		"

MINISTRY OF OIL
 ESTABLISHMENT NAME : OIL PROJECTS COMPANY (SCOP)
 LOCATION : ALL SITES

SHEET NO. 6 OF 12

HEAVY CONSTRUCTION EQUIPMENT .

CODE	ITEM DESCRIPTION	UNIT	QTY.	COMMENT
08-05-00415	- CRANES HYDRAULIC TRUCK MOBILE 25 TONS WITH RECOMMENDED SPARE PARTS	NO.	4	Heavy construction equipment
08-05-00416	- CRANES HYDRAULIC TRUCK MOBILE 50 TONS WITH RECOMMENDED SPARE PARTS	NO.	3	"
08-05-00417	- CRANES HYDRAULIC TRUCK MOBILE 80 TONS WITH RECOMMENDED SPARE PARTS	NO.	1	"
08-05-00418	- CRAWLER HYDRAULIC EXCAVATORS WITH DIESEL ENGINE (239) hp. WITH 1.0 Cu.M BUCKET SIZE WITH RECOMMENDED SPARE PARTS	NO.	6	"
08-05-00419	- LORRY WITH CRANE 5 TON WITH RECOMMENDED SPARE PARTS	NO.	3	"
08-05-00420	- TIPPER (DUMP TRUCKS) (6 x 4) WITH RECOMMENDED SPARE PARTS.	NO.	6	"
08-05-00421	- DRINKING WATER TANKER 13 Cu.M CAPACITY WITH RECOMMENDED SPARE PARTS.	NO.	3	"
08-05-00422	- FUEL TANKER 13 Cu.M CAPACITY WITH RECOMMENDED SPARE PARTS.	NO.	3	"
08-05-00423	- LUBRICATING TRUCK WITH RECOMMENDED SPARE PARTS.	NO.	2	"

HEAVY CONSTRUCTION EQUIPMENT

CODE	ITEM DESCRIPTION	UNIT	QTY.	COMMENT
08-05-00424	- TRACK - TYPE TRACTORS (BULLDOZER) WITH RATED ENGINE kw (123) D6 WITH RECOMMENDED SPARE PARTS	NO.	5	Construction equipment
08-05-00425	- TRACK - TYPE TRACTORS (BULLDOZER) WITH RATED ENGINE kw (160) D7 WITH RECOMMENDED SPARE PARTS	NO.	3	"
08-05-00426	- WHEEL LOADER WITH HYDRAULIC DRIVE WITH (230 ~ 250) hp WITH RECOMMENDED SPARE PARTS.	NO.	5	"
08-05-00427	- GRADER WITH HYDRAULIC DRIVE (150) hp. AT (2200)rpm WITH RECOMMENDED SPARE PARTS	NO.	2	"
08-05-00428	- SIDE BOOM 571 WITH RECOMMENDED SPARE PARTS	NO.	3	"
08-05-00429	- SIDE BOOM 572 WITH RECOMMENDED SPARE PARTS	NO.	5	"

LIGHT CONSTRUCTION MACHINERY AND ACCESSORIES.

CODE	ITEM DESCRIPTION	UNIT	QTY.	COMMENT
08-05-00430	- FORK LIFT 5 TONS WITH RECOMMENDED SPARE.	NO.	2	Hydraulic Testing equipment
08-05-00431	- PORTABLE ROTARY SCREW COMP. WITH WATER COOLED ENG. MAX. WORKING PRESSURE (20) bar. WITH RECOMMENDED SPARE PARTS.	NO.	4	"
08-05-00432	- WATER PUMPS FILLING WITH CAPACITY (0-500)Cu.m./h, TOTAL HEAD (397-273-228)m WITH RECOMMENDED SPARE PARTS.	NO.	2	"
08-05-00433	- TEST PUMP HORIZONTAL TRIPLEX PISTON PUMP, CAP. (200)/min, WORKING PRS. (260)bar, ENGINE RATING (100)kw AT 1800 rpm WITH RECOMMENDED SPARE PARTS.	NO.	2	"
08-05-00434	- DEWATERING PUMP CENTRIFUGAL PUMP WITH CAP. (250)Cu.m./h, PUMP INPUT 60 kw, ENGINE POWER (65-85) kw DIESEL FUEL WITH RECOMMENDED SPARE PARTS.	NO.	4	"
08-05-00435	- GENERATORS / SKID 250-300 KVA WITH RECOMMENDED SPARE PARTS.	NO	2	"

MINISTRY OF OIL
SHEET NO. 9 OF 12
ESTABLISHMENT NAME : OIL PROJECTS COMPANY (SCOP)
LOCATION : ALL SITES
LIGHT CONSTRUCTION MACHINERY
AND ACCESSORIES .

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00436	- WELDING MACHINES DIESEL DRIVEN / 400 Amp WITH RECOMMENDED SPARE PARTS.	NO	100	Light construction equipment
08-05-00437	- ELECTRICAL WELDING MACHINES (400 - 600) Amps WITH RECOMMENDED SPARE PARTS.	NO	20	"
08-05-00438	- PIPELINE BORING MACHINE WITH RECOMMENDED SPARE PARTS	SET.	2	"
08-05-00439	- CLAMPS INTERNAL & EXTERNAL VARIOUS WITH RECOMMENDED SPARE PARTS.	SET.	4	"

ESTABLISHMENT NAME : OIL PROJECTS COMPANY (SCOP)

LOCATION : ALL SITES

SPARE PARTS FOR CONSTRUCTION
MACHINERY

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00440	- SPARE PARTS FOR MAINTENANCE OF SIDE BOOM /CAT. 583,572,571	ITEM.	100	Spare parts for general maintenance
08-05-00441	- SPARE PARTS FOR MABULLDOZERS/CAT. D9,D8,D7	ITEM.	50	"
08-05-00442	- SPARE PARTS FOR MAINTENANCE OF SHOVELS/CAT.LIEBHER	ITEM.	50	"
08-05-00443	- SPARE PARTS FOR MAINTENANCE OF GRADERS/CAT.	ITEM.	30	"
08-05-00444	- SPARE PARTS FOR MAINTENANCE OF EXCAVATORS. LIEBHER/CASE	ITEM.	50	"
08-05-00445	- SPARE PARTS FOR MAINTENANCE CRANES , TADANO/P&H LIEBHER	ITEM.	100	"
08-05-00446	- SPARE PARTS FOR MAINTENANCE OF CRC/EVANS EQUIPMENT	ITEM.	400	"
08-05-00447	- SPARE PARTS FOR MAINTENANCE OF WELDING MACHINES LINCOLN .	ITEM.	50	"
08-05-00448	- SPARE PARTS FOR MAINTENANCE OF GENERATORS MUNRADTECH/DETROIT .	ITEM.	50	"

LOCATION : ALL SIT SPARE PARTS FOR CONSTRUCTION MACHINERY .

CODE	ITEM DESCRIPTION	UNIT	QTY.	COMMENT
08-05-00449	- SPARE PARTS FOR MAINTENANCE OF WATER PUMPS KSB	ITEM.	60	Spare parts for maintenance
08-05-00450	- SPARE PARTS FOR COMPRESSORS / ATLAS COPCO .AIRMAN .	ITEM.	40	"
08-05-00451	- SPARE PARTS FOR FORK LIFT.S./KOMATSU / YALE	ITEM.	40	"

MINISTRY OF OIL

SHEET NO. 11 OF 12

ESTABLISHMENT NAME : OIL PROJECTS COMPANY (SCOP)

LOCATION : ALL SITES SPARE PARTS FOR TRANSPORT EQUIPMENT .

CODE	ITEM DESCRIPTION	UNIT	QTY.	COMMENT
08-05-00452	- SPARE PARTS FOR HEAVY TRUCKS . SCANIA/RENAULT	ITEM.	1000	Spare parts for transportation

LOCATION : ALL SITES CONSTRUCTION CONSUMABLES

CODE	ITEM DESCRIPTION	UNIT	QTY.	COMMENT
08-05-00453	- PIPELINE LAYING ACCESSORIES AND CONSUMABLES	ITEM.	30	Equipment for tank construction
08-05-00454	- TANK ERECTION ACCESSORIES AND CONSUMABLES	ITEM.	40	"
08-05-00455	- WORKSHOP TOOLS & EQUIPMENTS	ITEM.	50	"

MINISTRY OF OIL

SHEET NO. 12 OF 12

ESTABLISHMENT NAME : OIL PROJECTS COMPANY (SCOP)

LOCATION : ALL SITES / TYRES

CODE	ITEM DESCRIPTION	UNIT	QTY.	COMMENT
08-05-00456	- TYRES FOR HEAVY TRANSPORT 1200 x 20	NO.	1200	Spare tyres for transportation
08-05-00457	- TYRES FOR HEAVY TRANSPORT 1200 x 24	NO.	400	"
08-05-00458	- TYRES FOR HEAVY EQUIPMENT 1100 x 20	NO.	200	"
08-05-00459	- TYRES FOR TRANSPORT EQUIPMENT 825 x 15 & 1000 x 15	NO.	200	"

MINISTRY OF OIL

SHEET NO. 1 OF 3

ESTABLISHMENT NAME : OIL EXPLORATION COMPANY

LOCATION : BAGHDAD

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
	-INTEGRATED PROJECT FOR TRANSCRIPTION , SCANNING , MANAGEMENT , PROCESSING AND INTERPRETATION 2D/3D SYSTEM FOR SEISMIC DATA RE-PROCESSING FOR OIL FIELD PRODUCTION ENHANCEMENT AND OPTIMIZATION			Refers to Ahdad, W Qurna, and Bia Hassan. Project to determine the size and status of existing producing horizons and build accurate reservoir models to optimise production & reservoir management
08-05-00460	-HARDWARE FOR DATA RECOVERY DEVICES	NOS.	6	"
08-05-00461	-HARDWARE/SOFTWARE FOR DATA TRANSCRIPTION TO HIGH DENSITY MEDIA	SET	1	"
08-05-00462	- HARDWARE/SOFTWARE FOR SCANNING AND VECTORIZING SEISMIC SECTIONS, WELL LOGS AND ASSOCIATED DOCUMENTS	SET	1	"
08-05-00463	-2D/3D LAND DATA PROCESSING AND INTERPRETATION SYSTEM	SYST.:M	1	"
08-05-00464	-GEOLOGICAL INTERPRETATION SOFTWARE (INTEGRAL PLUS)	NOS.	1	"
08-05-00465	-GEOLOGICAL RESERVOIR SOFTWARE	NOS.	1	"

MINISTRY OF OIL
SHEET NO. 2 OF 3
ESTABLISHMENT NAME : OIL EXPLORATION COMPANY
LOCATION : BASRAH, KIRKUK, & RAMADI

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
	- 3D SEISMIC ACQUISITION FOR OIL FIELD PRODUCTION ENHANCEMENT & OPTIMIZATION			"
08-05-00466	-SEISMIC ENERGY SOURCE VIBRATOR 60,000 lb= 23 TONS	NOS.	10	"
08-05-00467	-DRILLING RIG CAPACITY 100 MTRS. MOUNTED ON BUGGY	NOS.	2	"
08-05-00468	-PORTABLE DRILLING RIGS	NOS.	3	"
08-05-00469	-GPS GLOBAL POSITIONING SYSTEM	SET	1	"
08-05-00470	-TELEMETRY RECORDING UNIT	NOS.	120	"
08-05-00471	-GEOPHONE STRINGS	SET	1 000	"
08-05-00472	-260SEISMIC CABLES EACH OF 330 METERS LENGTH WITH 15 TRANSMISSION CABLES EACH OF 440 METERS	NOS.	275	"
08-05-00473	-3D PRE-PLANNING AND QUALITY CONTROL FIELD PROCESSING SYSTEM	NOS.	2	"
08-05-00474	-FIRE FIGHTING VEHICLES	NOS.	2	Safety

MINISTRY OF OIL

SHEET NO. 3 OF 3

ESTABLISHMENT NAME : OIL EXPLORATION COMPANY

LOCATION : BAGHDAD

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
	-GEOCHEMICAL STUDIES AND ANALYSES OF PRODUCING FIELDS OILS AND RESERVOIRS			"
08-05-00475	-SPARE PARTS & OPERATIONAL FOR STRUERS PRE-GRINDING AND POLISHING	SET	1	"
08-05-00476	-FLOW CONTROLLER FOR GAS SERVICE	NOS.	4	"
08-05-00477	-SPARE PARTS FOR MERCURY INJECTION	SET	1	"
08-05-00478	-SPARE PARTS FOR CENTRIFUGAL EXTRACTOR	SET	1	"
08-05-00479	-CALIBRATION STANDARD AND FLOW CONTROLLER ASSEMBLY	SET	1	"
08-05-00480	-SPARE PARTS FOR LECO (CR-12) MODEL NO. (781-700)	SET	1	"
08-05-00481	-CHN ELEMENTAL ANALYZER INSTRUMENT	NOS.	1	"
08-05-00482	-WORK STATIONS	NOS.	6	"

MINISTRY OF OIL

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SHEET NO. 1 OF 2

SRIN

ESTABLISHMENT NAME: NORTH REFINERIES CO.

LOCATION : BAIJI

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00483	WASTE WATER TREATMENT PLANT REVAMP WHICH INCLUDES:			
	- REPAIR AND/OR REPLACEMENT OF FAULTY EQUIPMENT AND MATERIALS FOR SAL 1 AND NORTH REFINERY WWT UNITS.	LOT	2	Balance of spare parts order for repairs to waster water treatment plant, of which first order approved under Phase 4 application.
	- ALL PLANT WASTE WATER CONTROL ROOM FOR SAL1,SAL2,AND NORTH REFINERY WWT UNITS.	LOT	3	
	- COMMON PARTS WITH SAL 1& SAL2 UNITS, INCLUDING STORM WATER PUMPS AND TANKS, SAFETY EQUIPMENT,SLOP OIL HANDLING SYSTEMS,LABORATORY EQUIPMENT AND MATERIALS AND 28"DISCHARGE PIPELINE OF 6KM LENGTH.	LOT	2	
	- CENTRAL SLUDGE TREATMENT UNIT FOR SAL1 SAL2, NORTH REFINERY AND LOC WWT UNITS SLUDGES	LOT	2	
	- LOC WWT BIOLOGICAL TREATMENT REJUVENATION & CONNECTION TO SAL1 CHECK BASIN VIA 12" PIPELINE OF 1.5 KM LENGTH.	SET	2	
	HYDROCRACKER & ASSOCIATED UNITS REVAMP:			
	- HYDROCRACKER UNIT:REPAIR & REPLACE FAULTY EQUIPMENT AND MATERIALS.	LOT	1	Application for the refurbishing of the hydrocracker unit which will increase the quality of refined products produced, which can then be substituted in power stations releasing up to 60,000 bpd of crude oil for export
	- HYDROGEN PRODUCTION UNIT: REPAIR & REPLACE FAULTY EQUIPMENT AND MATERIALS.	LOT	1	
	- VACUUM UNIT: REPAIR & REPLACE FAULTY EQUIPMENT AND MATERIALS.	LOT	1	
08-05-00484	- SULFUR RECOVERY UNIT: REPAIR & REPLACE FAULTY EQUIPMENT AND MATERIALS.	LOT	1	
	- UTILITIES AND COMMON PARTS:			
	-REPAIR & REPLACE FAULTY EQUIPMENT AND MATERIALS.	LOT	3	
	- SUPPLY OF AN RO DESALINATION UNIT OF 400 M3/H	LOT	1	
	- TO PROVIDE CUSTOMIZED SPECIAL INSPECTION EQUIPMENT & MATERIALS.	LOT	25	

** THESE UNITS WERE BUILT TO PRODUCE GAS OIL OF VERY LOW SULFUR CONTENT TO COMBAT AIR POLLUTION.

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00485	<p>MECHANICAL EQUIPMENT COMPLETES & SPARE PARTS KITS:</p> <ul style="list-style-type: none"> - PUMPS "NEW SETS" - PUMPS" REPAIR KITS SETS" - STEAM TURBINES" NEW SETS" - STEAM TURBINES" REPAIR KITS SETS": - COMPRESSORS "REPAIR KITS SETS": - GEAR BOXES - FINFAN COOLING BUNDLES - HEAT EXCHANGER BUNDLES - TUBES, PIPES, FITTINGS - VALVES, GASKETS - SUPER HEATER COILES 	<p>SETS SETS SETS SETS SETS SETS SETS SETS SETS SETS SETS</p>	<p>120 5000 100 4000 1000 5 25 50 100 1000 4</p>	<p>Further repairs to the mechanical equipment. Enhancing efficiency of the refinery and quality of products allowing fuel oil to be burned in associated power station. Claimed will release 100,000 bpd of crude oil for export</p>
08-05-00486	<p>INSTRUMENTATION CONTROL SYSTEM SPARE PARTS "NEW SETS":</p> <ul style="list-style-type: none"> - TELEPHONE EXCHANGE AND AUXILIARIES - CONTROL VALVES, PRESSURE TRANSMITTERS, LEVEL TRANSMITTERS ETC..... 	<p>SET SET</p>	<p>1 1000</p>	<p>"</p>
08-05-00487	<p>MAINTENANCE AND TRANSPORT VEHICLES:</p> <ul style="list-style-type: none"> - CRANE 120 TONS - FORKLIFTS 	<p>NOS NOS</p>	<p>1 10</p>	<p>"</p>
08-05-00488	<p>INSTRUMENTS FOR ENVIRONMENTAL PROTECTION AND LABORATORIES DEVICES</p>	<p>NOS</p>	<p>30</p>	<p>Re-equipping environmental testing laboratory</p>
08-05-00489	<p>REFORMING & HYDROTREATING CATALYST</p>	<p>TONS</p>	<p>500</p>	<p>Increases efficiency of operating unit</p>
08-05-00490	<p>FIRE FIGHTING TRUCKS</p>	<p>NOS</p>	<p>2</p>	<p>Safety related</p>
08-05-00491	<p>OIL SKIMMING EQUIPMENT</p>	<p>SETS</p>	<p>4</p>	<p>Repeat of application in Phase 4</p>

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00492	WATER TREATMENT PLANT COMPLETE (RO) 510 CUBIC METER CAPACITY WITH RECOMMENDED SPARE PARTS AND ACCESSORIES	SET	1	Replacement water treatment plant to control effluent water quality which is discharged into River Tigris
08-05-00493	VEHICLES & TRUCKS:- -CRANES WITH SPARE PARTS: 50 TON 2.5 TON - WASTE WATER TANKERS WITH SPARES -DIESEL DRIVEN WELDING MACHINES WITH SPARES -AIR COMPRESSORS WITH SPARES -VACUUM TRUCKS WITH SPARES -HAND TOOLS, DRILLS, WRENCHES , EXPANDERS AND TESTING DEVICES WITH SPARES -GARBAGE TRUCK WITH SPARES	NO. NO. NO. NO. NO. NO. PCS NO.	1 1 2 15 7 1 2000 1	Maintenance
08-05-00494	- PUMPS COMPLETE, COMPRESSORS COMPLETE, FANS, GEARS, STEAM TURBINES, ... etc - SPARE PARTS FOR ABOVE MACHINES & SPARE PARTS FOR EXISTING MACHINES	SETS PCS	300 4000	Downstream production improvements
08-05-00495	- ELECTRICAL EQUIPMENT,MCC,MOTORS,STARTERS,... etc - SPARE PARTS FOR ABOVE EQUIPMENT AND SPARE PARTS FOR EXISTING EQUIPMENT	SETS PCS	200 3000	"
08-05-00496	- INSTRUMENTS COMPLETE , TRANSMITTERS RECORDERS, INDICATORS, CONTROLLERS, AIR DRYERS. - SPARE PARTS FOR ABOVE AND SPARE PARTS FOR EXISTING INSTRUMENTS	SETS PCS	1000 3000	"
08-05-00497	- SPARE PARTS FOR BOILERS AND FURNACES (TUBES, BURNERS, FLAME DISTRIBUTORS, REFRACTORY, HIGH TEMPERATURE, CASTABLE CEMENT, SOOT BLOWERS,...etc	METERS TON. PCS	10000 30 4000	"

MINISTRY OF OIL

ESTABLISHMENT NAME: MIDLAND REFINERIES CO.

LOCATION: DAURA REFINERY

SHEET NO. 2 OF 2

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00498	- PIPES (SIZES FROM 1 - 12 INCHES) - FITTING,GASKETS,ELBOWS, FLANGES, VALVES, REDUCERS, HOT TAPPING MACHINES, LEAK SEALING KITS	METERS PCS	25 000 15 000	These items were ordered in Phase 4, and have been re-ordered
08-05-00499	- CONSUMABLES (WELDING ELECTRODES) - TOOLS AND ACCESSORIES (GRINDING DISCS)	TONS PCS	10 1000	Maintenance items
08-05-00500	- INSPECTION TOOLS & EQUIPMENT AND MEASURING EQUIPMENT FOR ENVIRONMENTAL PROTECTION AND TESTING LABORATORY EQUIPMENT	SET	150	Environmental protection and testing laboratory equipment
08-05-00501	-SPARE PARTS FOR WATER TREATMENT UNIT (IONICS)	SETS PCS	30 6000	Spare Parts for water treatment plant
08-05-00502	- SPARE PARTS FOR LUBE OIL EQUIPMENT, ROTATRY FILTER, CHILLERS, SPEED VARIATORS	SETS PCS	100 3000	Spare Parts for lube oil plant, allowing production of 100,000 tonnes per annum of lube oil
08-05-00503	- SPARE PARTS FOR DRESSER-RAND 4 - MW GENERATOR	SETS PCS	100 500	Spare Parts for power generation
08-05-00504	- BOILER + DEMIN . PLANT	SET	1	Spare Parts for boiler plant and demineralisation plant

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00505	-COMPLETE ROTATING MACHINES : (PUMPS,COMPRESSORS,TURBINES FANS, GEARBOXES) FOR BASRAH REFINERY UNITS	NOS	40	Overall application for spare parts would improve gas oil and fuel oil quality releasing 50,000 bpd of crude for export
08-05-00506	-SPARE PARTS FOR ABOVE ROTATING MACHINES	SET	150	"
	-MEASURING & CONTROL INSTRUMENTS	NOS	100	
08-05-00507	-SPARE PARTS FOR THE ABOVE INSTRUMENTS	SET	150	"
	-THERMOCOUPLE & CONTROL CABLES	METER	1000	
08-05-00508	-ELECTRICAL MOTORS & MCC	NOS	15	"
	-SPARE PARTS FOR ABOVE ELECTRICAL EQUIPMENT	SET	50	
08-05-00509	-INSTRUMENTS FOR ENVIRONMENTAL PROTECTION	NOS	15	Gas analysis equipment
	-LABORATORY DEVICES	NOS	4	
08-05-00510	-COMPLETE HEAT EXCHANGERS BUNDLES	NOS	50	Replacement heat exchanger units
	-SPARE PARTS FOR HEAT EXCHANGERS (GASKETS-ETC) & TOOLS	SET	300	
08-05-00511	-CRANE 120 TONS & SPARES	NOS	1	Maintenance and improvement of water quality from mains
	-TANKERS FOR DRINKING WATER	NOS	2	
08-05-00512	-FORKLIFTS (DIFFERENT CAPACITIES)	NOS	10	Maintenance
	-SPARE PARTS FOR ABOVE	SET	100	
08-05-00513	-STEAM BOILER 150 T/HR REHABILITATION	NOS	1	Safety item as N2 required for refinery blanketing operations
	- PACKAGE NITROGEN UNIT	NOS	1	
08-05-00513	- SPARE PARTS FOR ABOVE	SET	20	Maintenance
	-PIPES DIFFERENT SIZES AND MATERIALS	KM	15	
	-FITTINGS, VALVES, DIFFERENT SIZES, MATERIALS & TYPES, BOLTS & NUTS DIFFERENT SIZES	NOS	20 000	

MINISTRY OF OIL
 SHEET NO: 1 OF 1
 ESTABLISHMENT NAME: NORTHERN GAS INDUSTRY
 LOCATION : KIRKUK

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00514	- AL UMINUM ALLOY GAS HEAT EXCHANGER	NOS	1	All items in this section refer to removal of gas from crude oil .
08-05-00515	SET OF VALVE TRAYS FOR SWEETENING UNIT-	SET	2	Refers to spare parts for absorber unit
08-05-00516	ROTARY MACHINES & SPARES -	PCS	3000	Spares for pumps and turbines
08-05-00517	ELECTRICAL & CONTROL INSTRUMENTS & SPARES-	SET	15	Spare for data logging and control panels
08-05-00518	TRUCKS FOR LIFTING & HANDLING EQUIPMENT-	NOS	4	Maintenance
08-05-00519	FIRE FIGHTING TRUCKS-	NOS	2	Trucks for foam and chemical fire-fighting not ordered before
08-05-00520	INSTRUMENTS FOR ENVIRONMENTAL PROTECTION - AND LABORATORY DEVICES	NOS	15	Monitors for H2S and toxic gases.

SHEET NO. 1 OF 1

MINISTRY OF OIL
ESTABLISHMENT NAME: SOUTH GAS CO.S.C.
LOCATION : BASRAH

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00521	- COMPLETE ROTATING MACHINES: (PUMPS, COMPRESSORS, GAS TURBINES) - SPARE PARTS FOR ABOVE (INSTRUMENTS, LIGHTING, CABLES, MOTORS) - PIPES - FITTINGS - TOOLS	NOS SET METER PCS SETS	20 200 25000 15000 100	Complete line replacement for 25 kms of pipe allowing oil to be transferred North
08-05-00522	VEHICLES & TRUCKS WITH SPARE PARTS :- - CRANES: 50TON 30TON 20TON 10TON - TANKER TRUCKS FOR WATER TRANSPORTATION: 20TON 35TON - LORRIES 12 TON WITH CRANE 9TON MIN. CAPACITY - FORK LIFT TRUCKS: 5 TON 3 TON	NOS. NOS. NOS. NOS. NOS. NOS. NOS. NOS. NOS.	2 1 1 1 3 3 4 3 2	Items associated with line construction and maintenance
08-05-00523	- FIRE FIGHTING TRUCKS & SPARE PARTS - SAFETY EQUIPMENT & SPARE PARTS - INSPECTION EQUIPMENT & SPARE PARTS	NOS SET SET	2 4 2	Safety and maintenance
08-05-00524	- MEASURING & ELECTRICAL TOOLS	SET	20	Metering equipment

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00525	-TRUCK TRACTORS 6X4 (STANDARD)	NOS	50	All items in this sector refer to the vehicular distribution of products. Improvements will reduce environmental effects, and reduce leakage from the current 7% overall
08-05-00526	-- SEMI TRAILORS FOR TRANSPORTING LPG CAP. 20 TONS (46000LIT.)	NOS	50	"
08-05-00527	- RECOVERY TRUCKS LIFTING CAP 20 - 25 TONS	NOS	5	"
08-05-00528	FORK LIFT CAP. 5 TONS-	NOS	10	"
08-05-00529	WORKSHOP MOBILES -	NOS	5	"
08-05-00530	- FIRE FIGHTING EQUIPMENT : FIRE FIGHTING VEHICLE PUMPS ACCESSORIES AND PARTS	NOS NOS NOS	2 5 200	"
08-05-00531	PETROL STATIONS: FUEL DISPENSERS RECOMMENDED SPARE PARTS PUMPS - WITH RECOMMENDED SPARE PARTS	NOS NOS	400 100	"
08-05-00532	- -PRODUCT MEASURING METERS SIZE 1 1/2", 3" WITH SPARE PARTS	NOS	100	"
08-05-00533	- PETROLEUM SUPPLY HOSES 3/4" TO 6"	NOS	4000	"
08-05-00534	PIPES SIZES FM2"-6"- FITTINGS FM2"-6"-	METER NOS	20000 5000	"
08-05-00535	ELECTRIC CABLES- -CIRCUITS, CONTACTORS -LIGHTING FITTINGS	METER NOS NOS	50000 5000 25000	"
08-05-00536	FUEL LOADING AND UNLOADING PUMPS: - ELECTRIC DRIVEN - DIESEL DRIVEN (CAP. 45 M3/H)	NOS NOS	50 25	"

MINISTRY OF OIL

ESTABLISHMENT NAME: OIL PRODUCTS DISTRIBUTION CO.

LOCATION: BAGHDAD

SHEET NO: 2 OF 2

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00537	- VACUUM TRUCKS FOR SUCTION AND TRANSPORT SLOPS AND SLUDGE WITH THE REQUIRED SPARE PARTS	NOS	5	"
08-05-00538	DIESEL ELECTRICAL GENERATOR 50 KVA 100 KVA 250 KVA	NOS NOS NOS	15 10 4	"
08-05-00539	- INSTRUMENTS FOR MEASURING HYDROCARBON GASES & INSPECTION TESTING.	NOS	40	"
08-05-00540	- STEEL PLATES TO MANUFACTURE 50M3 STORAGE TANKS THICKNESS 6-10 MM	TON	1200	Construction of 50M3 tanks for local product storage
08-05-00541	- WELDING ELECTRODES - WIRES FOR SEALING THE TANKS AND VALVES - TOOLS FOR ABOVE - TAGS WITH PRINTED SERIAL NOS.	TON METER NOS NOS.	15 200 000 30 100 000	Sealing wires
08-05-00542	- LEVEL CONTROL EQUIPMENT FOR SERVICE STATION & DEPOTS	NOS	100	Control equipment to prevent spillage
08-05-00543	- WELDING MACHINES DIESEL DRIVEN	NOS	20	Maintenance
08-05-00544	- LABORATORY TESTING EQUIPMENT	NOS	100	Quality control
08-05-00545	- COMPLETE ENGINES TO REPLACE DAMAGED ONES ON EXISTING TRUCKS - VARIOUS TYPES	NOS	100	Replacement engines for transportation

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00546	- FLOW METER COMPLETE FOR MEASURING QUANTITIES OF OIL PRODUCTS PUMPED IN PIPELINES INCLUDING MECHANICAL PARTS OF DIFFERENT SIZES (3-12) INCHES	NOS.	80	Metering equipment for transfer of product to power wstations
08-05-00547	- DENSITY METER COMPLETE UNIT FOR CONTROL OF MULTI-OIL PRODUCTS IN PIPELINES WITH ACCESSORIES	SETS	10	Analytical equipment to prevent contamination on line transfers
08-05-00548	<u>CATHODIC PROTECTION MATERIALS AND EQUIPMENT TO PROTECT PIPELINES FROM CORROSION:</u> - T/R STATIONS (50-100) A VDC/50-150 COMPLETE UNIT - MEASURING EQUIPMENT - HIGH SILICON-CHROMIUM IRON ANODES	NOS. NOS. NOS.	10 1 300	Anti corrosion equipment for pipelines

MINISTRY OF OIL
ESTABLISHMENT: OIL PIPELINES COMPANY

SHEET 2 OF 8

LOCATION: OIL DEPOTS / PUMPING STATIONS / PIPELINES NETWORK

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00549	- SPARES FOR AUTOMATIC CONTROL AND SUPERVISION EQUIPMENT IN DEPOTS AND PUMPING STATIONS TO CONTROL STORAGE AND PUMPING OF OIL PRODUCTS INCLUDING SPARE PARTS FOR VALVES, LEVEL TANKS, AIR-CONDITIONING, CONTROL PANELS AND COMPUTERS	ITEM	10000	Improvement to control equipment for product transfer
08-05-00550	-ELECTRICAL (H.T 33KV) SWITCH GEAR FOR MOTORS AND CONTROL EQUIPMENT IN OIL DEPOTS AND PUMPING STATIONS WITH ACCESSORIES AND SPARE PARTS	SETS	2	"
08-05-00551	-AUTOMATIC LOADING ARMS FOR REFUELING OIL TANKS (ROAD AND RAIL) WITH TWO YEARS RECOMMENDED SPARE PARTS, COMPLETE ASSEMBLY	NOS.	50	Equipment to prevent spillages on loading of vehicles
08-05-00552	-LIGHTING EQUIPMENT FITTINGS AND LAMPS (INDUSTRIAL) OF DIFFERENT SIZES AND TYPES FOR OIL DEPOTS AND PUMPING STATIONS	NOS.	10000	Alarms and neon lamps for control equipment

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MINISTRY OF OIL
ESTABLISHMENT: OIL PIPELINES COMPANY
LOCATION: OIL DEPOTS / PUMPING STATIONS / PIPELINES NETWORK

SHEET 3 OF 8

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00553	-MOTOR PUMPING SETS, ELECTRICAL AND DIESEL DRIVEN, FOR LOADING AND OFF-LOADING OIL PRODUCTS OF DIFFERENT SIZES AND TYPES WITH TWO YEARS RECOMMENDED SPARE PARTS	NOS.	25	Pumping equipment for product transfer
08-05-00554	-JOINTING KIT OF DIFFERENT TYPES AND SIZES FOR HIGH, MEDIUM POWER CABLES AND TELECOMMUNICATION CABLES	ITEMS	1000	Repairs to communications equipment
08-05-00555	-GENERATING SETS COMPLETE DIESEL DRIVEN OF DIFFERENT SIZES (250-1000) KVA	NOS.	10	Generating sets for emergency use in the field
08-05-00556	-TRUCK TANKER COMPLETE WITH PUMP TO SUCK OIL SLUDGE AND WASTE FOR ANTI-POLLUTION PURPOSES	NOS.	2	Control of spillages and sludge treatment

**MINISTRY OF OIL
ESTABLISHMENT: OIL PIPELINES COMPANY
LOCATION: OIL DEPOTS / PUMPING STATIONS / PIPELINES NETWORK**

SHEET 4 OF 8

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00557	-FIRE FIGHTING PUMPS ELECTRICAL AND DIESEL DRIVEN SKID MOUNTED (COMPLETE PUMP SET) WITH RECOMMENDED SPARE PARTS FOR TWO YEARS OPERATION OF DIFFERENT SIZES UP TO 150 M ³ /HR WITH PRESSURE OF (15) BARS	NOS.	3	Fire fighting and safety
08-05-00558	-PETROLEUM TESTING EQUIPMENT (LABORATORY) OF DIFFERENT TYPES TO CHECK SPECIFICATIONS OF OIL PRODUCTS IN OIL DEPOTS AND OIL PUMPING STATION	NOS.	3000	Laboratory analysis equipment for quality control
08-05-00559	VALVES TO CONTROL FLOW OF OIL PRODUCTS IN PIPELINES, OIL DEPOTS AND PUMPING STATIONS, DIFFERENT SIZES AND CLASSES	NOS.	100	Control of product distribution
08-05-00560	FLEXIBLE HOSES FOR HANDLING OIL PRODUCTS, ARMORED TYPE OF DIFFERENT SIZES AND LENGTHS	NOS.	250	"

MINISTRY OF OIL
ESTABLISHMENT: OIL PIPELINES COMPANY

SHEET 5 OF 8

LOCATION: OIL DEPOTS / PUMPING STATIONS / PIPELINES NETWORK

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00561	-TELEPHONE EXCHANGE COMPLETE UNIT WITH ALL ACCESSORIES OF DIFFERENT SIZES AND CAPACITIES	NOS.	5	PABX system for communication systems
08-05-00562	-TELECOMMUNICATION EQUIPMENT FOR INTER DEPOTS COMMUNICATIONS	ITEM	100	Inter depot communications
08-05-00563	- POWER CABLE MEDIUM AND HIGH VOLTAGE DIFFERENT SIZES	KM	20	Communications equipment
	- MULTI-CORE CONTROL CABLES	KM	30	
	- MULTI-CORE TELECOMMUNICATION CABLES DIFFERENT SIZES	KM	20	
08-05-00564	-SPARE PARTS FOR EXISTING PUMPS SETS OPERATIONAL IN DEPOTS AND PUMPING STATIONS INCLUDING MAIN AND BOOSTER PUMPS AND VALVES	ITEM	10000	Spare parts for distribution system
08-05-00565	- FIRE FIGHTING TRUCKS FOR OIL INDUSTRY C/W ALL RECOMMENDED SPECIALIZED EQUIPMENT	NOS.	3	Safety equipment
	- TRUCK FIRE FIGHTING WATER TANKERS OF DIFFERENT CAPACITIES	NOS.	2	

MINISTRY OF OIL

SHEET 6 OF 8

ESTABLISHMENT: OIL PIPELINES COMPANY

LOCATION: OIL DEPOTS / PUMPING STATIONS / PIPELINES NETWORK

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00566	-HIGH AND LOW TENSION ELECTRICAL MEASURING AND TESTING EQUIPMENT	NOS.	60	Electrical measuring equipment ("mega's" and avo's")
08-05-00567	-MOTOR VEHICLE EQUIPPED WITH HYDRAULIC PLATFORM FOR STREET LIGHTING MAINTENANCE	NOS.	2	Safety equipment
08-05-00568	-HOT TAP EQUIPMENT WITH ALL RELEVANT ACCESSORIES AND WITH RECOMMENDED SPARE PARTS	NOS.	2	Equipment for dealing with pipe leakages whilst pipes in use
08-05-00569	-PIPE FITTINGS OF DIFFERENT SIZES AND SCHEDULES TO SUIT PIPE SIZE (3-16) INCHES	PIECES	1000	Equipment for distribution system
08-05-00570	-HYDROSTATIC TESTING EQUIPMENT, DIESEL DRIVEN, UP TO (150) BARS	NOS.	2	Line pressure testing
08-05-00571	-EARTH MOVING EQUIPMENT			Maintenance
	- MECHANICAL SHOVELS OF DIFFERENT SIZES	NOS.	2	
	- EXCAVATORS OF DIFFERENT SIZES	NOS.	2	

LOCATION: OIL DEPOTS / PUMPING STATIONS / PIPELINES NETWORK

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00572	LIFTING EQUIPMENT - FORK LIFTS OF DIFFERENT SIZES - CRANE SIZE (20) TONS - COMBINED TRUCKS LOADING VEHICLES OF DIFFERENT SIZES - OVERHEAD CRANES ELECTRICALLY DRIVEN COMPLETE WITH ACCESSORIES (5) TONS	NOS. NOS. NOS. NOS.	2 1 3 1	Maintenance equipment
08-05-00573	-ELECTRICAL WELDING SETS TRANSFORMER AND DIESEL TYPES OF DIFFERENT SIZES (20-400) AMPERES	NOS.	15	"
08-05-00574	-WELDING RODS OF DIFFERENT SIZES AND TYPES	TON	10	"
08-05-00575	-MECHANICAL MEASURING AND TESTING TOOLS	NOS.	30	"
08-05-00576	-TRANSFORMER OIL DRIER AND PURIFIER MACHINE, TRUCK MOUNTED WITH ACCESSORIES AND RECOMMENDED SPARE PARTS	NOS.	2	"

MINISTRY OF OIL

SHEET 8 OF 8

ESTABLISHMENT: OIL PIPELINES COMPANY

LOCATION: OIL DEPOTS / PUMPING STATIONS / PIPELINES NETWORK

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00577	-GASKETS DIFFERENT SIZES AND SCHEDULES WITH DIAPHRAMS	NOS.	10000	Workshop equipment
08-05-00578	-WORKSHOP MECHANICAL AND ELECTRICAL DIFFERENT TOOLS	NOS.	200	"
08-05-00579	-LINE PIPE OF DIFFERENT SIZES, SCHEDULES, TYPES	KM	10	"

LOCATION: ALL OVER THE COUNTRY

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00580	- LPG CYLINDERS	NOS	500 000	Replacement of dangerous cylinders
08-05-00581	LPG CYLINDER VALVE & THEIR SPARE PARTS: COMPLETE VALVES SPINDLES	NOS NOS	250 000 3 000 000	Replacement cylinder valves
08-05-00582	LPG CYLINDER FILLING HEADS & THEIR SPARE PARTS: FILLING HEADS COMPLETE SPARE PARTS	NOS SET	500 10	Replacement cylinder valves
08-05-00583	STEEL PLATES FOR:- LPG CYLINDER BODY BASE RING GUARD RING	TON TON TON	2000 500 500	Repair items for LPG cylinders
08-05-00584	- PRESSURE TESTING EQUIPMENT FOR LPG CYLINDERS	SET	5	Safety equipment
08-05-00585	- DIES FOR MANUFACTURE OF GUARD RINGS, BASE RINGS & STRIPS CUTTING WITH THEIR SPARE PARTS	SET	10	To enable local repairs and production
08-05-00586	- HYDRAULIC VALVES & SPARE PARTS FOR CYLINDER MANUFACTURING PLANT	SET	100	To enable local cylinder repair
08-05-00587	- PAINTING UNIT LPG CYLINDERS	SET	1	Maintenance
08-05-00588	- SPARE PARTS FOR LPG PLANTS: MECHANICAL SPARE PARTS FOR FILLING LINESINSTRUMENTS & THEIR SPARE PARTS BALL VALVES, SAFETY VALVES, & THEIR SPARE PARTS LPG HOSES 2", FOR LOADING & UNLOADING OF TRUCKS HEAT EXCHANGER TUBES	SET SET SET NOS NOS MTR. NOS	240 250 500 100 60 400 2000	Safety items for bottling plants

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00589	ELECTRICAL SPARE PARTS FOR LPG FILLING PLANTS: ELECTRIC MOTORS 1.5 - 120 KW HIGH TENSION CIRCUIT BREAKERS MULTI - CORE CABLES 2.5 - 120 SQ. MM GENERAL ELECTRIC MATERIALS ELECTRIC GENERATORS 150 - 750 KVA	NOS NOS METER NOS NOS	140 6 50000 13000 10	Electrical spare parts and maintenance
08-05-00590	ROTATING MACHINES :- LPG COMPRESSORS/AIR COMPRESSORS LPG PUMPS DIESEL WATER PUMPS ELECTRICAL WATER PUMPS SPARE PARTS FOR ABOVE	NOS NOS NOS NOS NOS SET	30 20 20 10 10 1000	Replacement items for 60 bottling plants throughout the country
08-05-00591	FIRE, SAFETY & INSPECTION EQUIPMENT:- FIRE FIGHTING EQUIPMENT SAFETY EQUIPMENT INSPECTION EQUIPMENT	NOS SET NOS NOS	750 250 100 20	Safety items

CODE	ITEM DESCRIPTION	UNIT	QTY	COMMENT
08-05-00592	CHEMICALS FOR LPG PROCESSING PLANT	TON	200	Additives to give an odour to LPG to detect leakage
08-05-00593	VEHICLES & TRUCKS WITH SPARE PARTS: AMBULANCE CRANE 50 TONS TANKER TRUCK FOR WATER TRANSPORTATION 18000 L. CAPACITY. TANKER TRUCK FOR OIL PRODUCTS TRANSPORTATION LOW LOADER TRUCK 35 TON. LORRY TRUCKS 15 TON FIRE FIGHTING TRUCK	NOS NOS NOS NOS NOS NOS NOS	1 1 1 1 1 2 1	Safety equipment and maintenance, water transportation, fire fighting
08-05-00594	COMMUNICATION SYSTEMS:- DIGITAL ELECTRONIC EXCHANGE WITH 30 EXTERNAL LINES & 400 INTERNAL LINES TELECOMMUNICATION SYSTEM VHF & UHF	SET NOS	1 25	Communications equipment to control LPG distribution system